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UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF CALIFORNIA

SAN DIEGO ASSOCIATION OF GOVERNMENTS; Plaintiff, vs. **BANK OF AMERICA CORPORATION;** **BANK OF AMERICA, N.A.;** **BANK OF TOKYO-MITSUBISHI UFJ LTD.;** **BARCLAYS BANK PLC;** **CITIGROUP, INC.;** **CITIBANK, N.A.;**	Case No. '13CV1466 L BGS **COMPLAINT FOR:** **(1) VIOLATIONS OF THE SHERMAN ANTITRUST ACT (15 U.S.C. §§ 1 *et seq.*)** **(2) VIOLATIONS OF CARTWRIGHT ACT (CAL. BUS. & PROF. CODE §§ 16720 *et seq.*);** **(3) FRAUD AND DECEIT** **(4) NEGLIGENT MISREPRESENTATION** **(5) INTERFERENCE WITH ECONOMIC ADVANTAGE**

COÖPERATIEVE CENTRALE RAIFFEISEN-BOERENLEENBANK B.A. (RABOBANK);

CREDIT SUISSE GROUP AG;

DEUTSCHE BANK AG;

HSBC HOLDINGS PLC;

HSBC BANK PLC;

JPMORGAN CHASE & CO.;

JPMORGAN CHASE BANK, N.A.;

LLOYDS BANKING GROUP PLC;

HBOS PLC;

ROYAL BANK OF CANADA;

THE NORINCHUKIN BANK;

SOCIÉTÉ GÉNÉRALE, S.A.

THE ROYAL BANK OF SCOTLAND GROUP PLC;

UBS AG;

PORTIGON AG;

WESTDEUTSCHE IMMOBILIENBANK AG,

Defendants.

(6) BREACH OF THE IMPLIED COVENANT OF GOOD FAITH AND FAIR DEALING

(7) UNJUST ENRICHMENT

<u>JURY TRIAL DEMANDED</u>

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Plaintiff San Diego Association of Governments ("Plaintiff" or "SANDAG"), hereby brings this action for damages and relief against Defendants Bank of America Corporation, Bank of America, N.A. (the "BofA Defendants" or "BofA"), Bank of Tokyo-Mitsubishi UJF Ltd. ("Tokyo-Mitsubishi"), Barclays Bank, PLC ("Barclays"), Citigroup, Inc., Citibank, N.A. ("Citigroup Defendants" or "Citigroup"), Coöperatieve Central Raiffseisen-Boerenleenbank, B.A. ("Rabobank"), Credit Suisse Group AG ("Credit Suisse"), Deutsche Bank AG ("Deutsche Bank"), HSBC Holdings PLC, HSBC Bank PLC ("HSBC Defendants" or "HSBC"), JPMorgan Chase & Co., JPMorgan Chase Bank, N.A. ("JPMorgan Defendants" or "JPMorgan"), Lloyds Banking Group PLC ("Lloyds"), HBOS PLC, ("HBOS"), Royal Bank of Canada ("RBC"), The Norinchukin Bank ("Norinchukin"), Société Générale, S.A. ("SocGen") The Royal Bank of Scotland Group PLC ("RBS"), UBS AG ("UBS"), Portigon AG, and WestDeutsche ImmobilienBank AG ("WestLB Defendants" or "WestLB") (hereinafter referred to collectively as "Defendants") for violations of federal antitrust laws (the "Sherman Act" and the "Clayton Act"), California antitrust laws ("Cartwright Act") (Cal. Bus. & Prof. Code §§ 16720, *et. seq.*), as well as for violations of California state common law. Plaintiff complains and alleges upon information and belief except as to those paragraphs that are based on personal knowledge, as follows:

I. INTRODUCTION

1. This case is about the global conspiracy to manipulate the London Interbank Offered Rate ("LIBOR") the benchmark interest rate that was once viewed as one of the most trustworthy foundations of the global financial system. It was because of that trust that LIBOR became one of the central benchmark interest rates used to set the rates for a vast array of financial instruments worth trillions of dollars, from Credit Default Swaps ("CDS") to variable rate fixed income instruments to consumer loans including home mortgages. In the simplest terms, LIBOR is intended to represent the interest rate that a Defendant LIBOR

member bank could borrow from other LIBOR member banks on any given date, depending on the currency and the duration of the loan. This rate is set by the LIBOR member banks each day and is intended to reflect the true cost of borrowing in any given economic environment, representing the amount of interest that one financial institution would charge for lending money to another financial institution in an arms-length transaction.

2. Because LIBOR was believed to represent the true cost of borrowing, it could be and was used as a benchmark for setting interest rates for many types of transactions. LIBOR is one of the most commonly used benchmark rates in the world, impacting everything from complex billion or multi-million dollar derivative contracts involving institutional investors, corporations and public entities, to simple bank loans for small businesses and individuals, to home mortgage loans taken out by individual American citizens. Variable mortgage rates, for example, can be pegged to LIBOR. Interest rates on variable rate instruments are often expressed at LIBOR plus X number of basis points, where a single basis point represents one one-hundredth of a percentage point (0.01%).

3. Defendants are global financial institutions involved in setting LIBOR each day, also referred to as LIBOR member banks. Defendants manipulated LIBOR, as well as other global benchmark interest rates that negatively impacted Plaintiff and, in doing so, deprived Plaintiff of the rate of interest that Plaintiff should have received from its investments or financial instruments. At various times, Defendants manipulated LIBOR by both inflating and suppressing the interest rate at which an individual LIBOR member bank could borrow funds from other banks. Defendants manipulated LIBOR to increase their own revenues, and suppressed LIBOR artificially low to create the illusion of creditworthiness by suggesting that if their borrowing rate was low they were not a credit risk. By acting in concert to knowingly overstate or understate their true

borrowing costs, Defendants caused LIBOR to be calculated artificially, and reaped hundreds of millions, if not billions, of dollars in illegitimate gains.

4. From at least as early as August of 2007, the Defendant banks conspired to, and did, manipulate LIBOR by misreporting to the British Bankers' Association ("BBA") the accurate interest rate at which each expected they could borrow funds from the other LIBOR member banks. In the case of artificially suppressing LIBOR, Defendants were able to significantly reduce, for example, the amount that should be paid to counterparties, including Plaintiff.

5. LIBOR is the benchmark interest rate used for a vast array of commercial and consumer financial transactions worth trillions of dollars annually. LIBOR rates are set for ten different currencies for 50 different maturity dates, covering millions, if not hundreds of millions of transactions. The fact that trillions of dollars in financial transactions can be linked to LIBOR demonstrates the confidence that has been placed on the reliability and trustworthiness of LIBOR and the banks that set LIBOR. It also explains, however, why the financial institutions at the heart of this conspiracy chose to manipulate LIBOR. In the midst of one of the worst economic crises in world history and with billions of dollars at stake, the financial institutions engaged in improper and illegal LIBOR rate manipulation in order to deceive the public and to reap massive profits to the detriment of institutional and individual investors.

6. The Defendants are members of the BBA. LIBOR is set based on information provided by each member bank to the BBA on a daily basis regarding their interbank borrowing rate. This information is used by BBA and Thomson Reuters to calculate approximately 150 different LIBOR rates for the ten different currencies and 50 different durations. From all of the interest rates reported by the BBA member banks to BBA and Thomson Reuters, the highest and lowest quartiles are removed and the middle two quartiles are averaged to reach the benchmark LIBOR rate. This is done in an effort to prevent isolated incidents of

deception. By removing the highest and lowest quartiles, the BBA sought to prevent a single financial institution or even three or four, from manipulating LIBOR. LIBOR could not be manipulated without the knowing involvement of most, if not all of the BBA member banks.

7. Since being publically made known in 2011, investigations into the manipulation of LIBOR have been ongoing in the United States, United Kingdom, Switzerland, the European Union, Japan, Canada, and Singapore. In the United States, several government agencies are involved, including the U.S. Department of Justice ("DOJ"), U.S. Commodity Futures Trading Commission ("CFTC"), and the U.S. Securities and Exchange Commission ("SEC").

8. In March of 2011, government regulators and prosecutors from many different countries announced that they were investigating LIBOR rate manipulation at financial institutions around the world. Plaintiff, like so many others, relied on and believed in the trustworthiness of the BBA, its member banks and the LIBOR rate calculation system. The announcement of government investigations into potential widespread collusion amongst the BBA member banks to manipulate one of the bedrock benchmark interest rates used by everyone from investors, lenders, banks and pension funds to value and price financial instruments has shaken the global financial system, with the global economy still on rocky ground. Revelations of such a wide-ranging scandal have raised serious questions about the integrity of LIBOR and other global benchmark interest rates.

9. Barclays and UBS were two of the first financial institutions to acknowledge the existence of the LIBOR rate manipulation conspiracy and their involvement in it. In a settlement deal announced on June 27, 2012, Barclays agreed to pay £290 million ($453.6 million) as part of a settlement with the U.K. Financial Services Authority ("FSA"), the CFTC, the DOJ's Fraud Section, and others relating to its involvement in the LIBOR rate manipulation. Barclays was the first financial institution to settle potential criminal and regulatory claims

against it. Barclays admission that it was involved in a widespread LIBOR manipulation scandal resulted in the resignation of Barclays' Chief Executive Officer Bob Diamond. UBS has also sought amnesty from government investigators and antitrust regulatory authorities for its involvement in the LIBOR rate manipulation. UBS has announced that it has requested and received conditional immunity from prosecution from the Swiss Competition Commission and the U.S. Department of Justice for its cooperation in the investigation.

10. According to documents and evidence that have been made public, it is evident that the LIBOR rate manipulation lasted for years and was widespread. According to a *Reuters* news article on Sunday, July 22, 2012, U.S. prosecutors and European regulators plan to arrest individual traders employed by the Defendants and charging them with colluding to manipulate global benchmark interest rates, including LIBOR. This wide-ranging and sweeping investigation into the rigging of interest rates began with LIBOR but the evidence uncovered has revealed that the rate-rigging scandal has impacted many different global benchmark rates, such as EURIBOR.

11. According to sources, U.S. federal prosecutors have recently contacted lawyers representing individual traders under investigation and notified them that arrests and criminal charges could be brought against their clients in the next few weeks. In similar prosecutions of this nature, criminal charges and indictments have continued for years after the investigation had begun as individuals and entities are either convicted or agree to cooperate with authorities. According to government investigators and regulators from the U.S., Europe and elsewhere, their investigations have revealed a fuller picture of the rate-rigging conspiracy, which impacts LIBOR and other global benchmark interest rates that underpin hundreds of trillions of dollars in assets.

12. A source familiar with the European investigation told *Reuters* that "[m]ore than a handful of traders at different banks are involved." According to

Reuters, U.S. investigators believe that more than a dozen current and former employees of several large financial banks are under investigation, including Defendants Barclays, UBS, Citigroup, HSBC and Deutsche Bank. In the United States, the regulatory investigation into LIBOR rate manipulation is led by the CFTC, which has made the LIBOR investigation one of its top priorities.

13. In a *Reuters* article dated July 20, 2012, sources indicate that there is interest by a number of the Defendants in this case to enter into a group settlement with global regulators. Based on the evidence available to government investigators, some of which has been made public, there is substantial evidence showing the existence of a conspiracy to manipulate global benchmark interest rates and the involvement of the Defendants in this conspiracy.

14. The Defendant LIBOR banks in this case engaged in illegal and improper conduct and engaged in a criminal conspiracy that caused harm to public entities and hundreds of millions of people around the world, both directly and indirectly. Defendants did this in order to protect their own self-interests and to reap millions or billions of dollars in improper and unwarranted gains without regard to the detriment of public entities and their citizens. The Defendants' deceptive and illegal acts have damaged Plaintiff and Plaintiff brings this lawsuit in order to recover those monies that were improperly taken from itself and its constituents and beneficiaries.

15. Except as alleged herein, Plaintiff does not have access to the underlying facts relating to Defendants' improper conduct. Such information is exclusively within the possession, custody and control of the Defendant banks and other insiders and unnamed co-conspirators, which prevents Plaintiff from further detailing Defendants' misconduct. Moreover, numerous pending government investigations – both domestic and foreign, including by the DOJ, CFTC, SEC, U.K. FSA, and the European Commission – concerning potential LIBOR manipulation and collusion could yield information from Defendants' internal

records or personnel that bears significantly on Plaintiff's claims. Indeed, as one news report observed in detailing U.S. regulators' ongoing investigation, "[i]nternal bank emails may prove to be key evidence...because of the difficulty in proving that banks reported borrowing costs for LIBOR at one rate and obtained funding at another."[1] Plaintiff thus believes further evidentiary support for its allegations will be revealed after it has a reasonable opportunity to conduct discovery.

16. To date, more than $2.6 billion has been paid to settle only the U.S. and U.K. investigations of LIBOR manipulation by only three of the Defendant LIBOR member banks: UBS ($1.5 Billion), Royal Bank of Scotland ($610 Million), and Barclays ($453 Million). The settlement statements include revealing admissions and documentary evidence confirming: (i) the Defendant LIBOR member banks engaged in a conspiracy to manipulate the benchmark interest rate, and (ii) the conspiracy was on a global scale. Examples of admissions about the conspiracy include the following:

- In August 2007, a senior RBS trader of Yen LIBOR told one of his colleagues that LIBOR is a "cartel now in London."[2] This price-fixing cartel existed from August 2007 through May 2010.

- On November 29, 2007, Barclays learned the confidential USD LIBOR submissions of ***every*** defendant before they were made public and adjusted its LIBOR submission downward by 20 basis points in order to stay within the pack of other banks' low LIBOR submissions.[3] Barclays managers issued standing instructions to stay within specific ranges of other panel banks' LIBOR submissions, indicating that Barclays believed that it would have continued access to every other panel bank's

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1 David Enrich, Carrick Mollenkamp & Jean Eaglesham, "U.S. Libor Probe Includes BofA, Citi, UBS," MarketWatch, March 17, 2011.

2 *In the Matter of The Royal Bank of Scotland plc and RBS Securities Japan Limited*, CFTC Docket No. 13-14. Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions (Feb. 6, 2013) ("RBS CFTC" at 14.

3 Financial Services Authority, Final Notice to Barclays Bank Plc (June 27, 2012) ("Barclays FSA") ¶118.

confidential LIBOR submissions before they were published. According to the CFTC's review of the evidence it collected, "Senior Barclays Treasury managers provided the [LIBOR] submitters with the ***general guidance*** that Barclays's submitted rates should be ***within ten basis points*** of the submissions by the other U.S. Dollar panel banks..."[4]

- That same day, on November 29, 2007, a Barclays manager explained that "other panel banks 'are reluctant to post higher and because no one will get out of the pack, ***the pack sort of stays low***.'"[5] Barclays and UBS admitted that they issued and obeyed instructions to stay within the pack of other banks' low LIBOR submissions during large portions of the Relevant Period.

- In communications between November 2007 and October 2008, Barclays' employees revealed that "all of the Contributor Panel banks, including Barclays, were contributing rates that were too low."[6]

- On April 27, 2008, a Barclays manager conceded, "to the extent that, um, the LIBORs have been understated, ***are we guilty of being part of the pack? You could say we are***."[7] As one Barclays submitter put it, "just set it where everyone else sets it, we do not want to be standing out."[8]

- In April 2008, the BBA acknowledged that no panel banks were "clean-clean" and that it understood what would happen to any bank that "moved against the trend of lower submissions."

- On May 21, 2008, when a Wall Street Journal reporter asked UBS by email why UBS had been "paying 12 basis points for [commercial paper] more than it was posting as a Libor quote," a senior manager at UBS told another senior UBS manager that "the answer would be 'because the whole street was doing the

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[4] *In the matter of Barclays, PLC, Barclays Bank PLC, and Barclays Capital, Inc.*, CFTC Docket No. 12-25, Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, as Amended, Making Findings and Imposing Remedial Sactions (June 27, 2012) ("Barclays CFTC") at 20 (emphasis added).

[5] Letter from Denis J. McInerney, Chief, Criminal Division, Fraud Section, United States Department of Justice, Appendix A (June 26, 2012 ("Barclays SOF") ¶ 43 (emphasis added).

[6] Barclays SOF ¶ 42.

[7] Barclays FSA ¶ 131 (emphasis added).

[8] Barclays FSA ¶ 123.

same and because we did not want to be an outlier in the libor fixings, just like everybody else.'"[9]

- On June 18, 2008, two UBS employees explained why it was important for banks to collusively suppress as part of an anticompetitive pack: "...***[Senior Manager B] want[s] us to get in line with the competition by Friday ... if you are too low you get written about for being too low ... if you are too high you get written about for being too high.***"[10]

- Between June 2008 and April 2009, "UBS's 3-month U.S. Dollar LIBOR submissions were ***identical*** to the published LIBOR fix, and largely consistent with the published LIBOR fix in the other tenors."[11] This was the case even though "[d]uring this 10-month period, there were significant disruptions in the financial markets, affecting individual financial institutions in different ways."[12]

- The empirical evidence shows that Defendants conspired to suppress USD LIBORs in a pack: they submitted LIBOR rates at similarly suppressed levels, which they could not have done without colluding because their submissions diverged dramatically and in unpredictable ways from benchmark rates that tracked market fundamentals.

- On February 11, 2013, during testimony before the Parliamentary Commission on Banking Standards, Johnny Cameron, the former Chairman of Global Banking and Markets at RBS Group, characterized the LIBOR manipulation efforts as "***a cartel of people across a number of banks who felt they could fix it.***"[13]

- On April 12, 2013, the DOJ charged RBS with one count of ***"price fixing" in violation of Section 1 of the Sherman Act.*** RBS admitted that it was responsible for the acts of its employees charged in the Information, which alleged that, from at least as early as 2007 through at least 2010, employees "engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce... the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen LIBOR, a key price

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[9] Letter from Denis J. McInerney, Chief, Fraud Section, Criminal Division, United States Department of Justice (Dec. 18, 2012) ("UBS SOF") ¶ 117.

[10] Financial Services Authority, Final Notice to UBS AG ¶ 124 (Dec. 19, 2012) ("UBS FSA") (emphasis added).

[11] UBS SOF ¶ 122 (emphasis added0.

[12] UBS SOF ¶ 123.

[13] Parliamentary Commission on Banking Standards, Feb. 11, 2013; Testimony of Johnny Cameron.

component of the price thereof, on certain occasions." Documents show that RBS colluded with other defendants in this price-fixing conspiracy.

II. JURISDICTION AND VENUE

17. This Court has Jurisdiction over this action pursuant to 28 U.S.C. Section § 1332 because there is complete diversity between the parties and the amount in controversy exceeds $75,000.

18. Venue as to Defendants is proper in this district pursuant to 15 U.S.C. §§ 15(a), 22, and 28 U.S.C. § 1391(b), (c), in that more than one defendant resides in the judicial district, is licensed to do business and/or is doing business in this judicial district. The interstate trade and commerce described herein has been carried out, in part, within this district.

19. Defendants are subject to this Court's jurisdiction because of their nationwide contacts and other activities, as well as their contacts and other activities within the State of California. The conspiratorial acts of the Defendants caused harm in the State of California and specifically within this district.

20. Defendants' conspiracy to fix LIBOR substantially affected commerce in the State of California and within this district because Defendants, directly or through their agents, engaged in activities affecting numerous individuals and entities, including Plaintiff, who resides in this district. Defendants have purposefully availed themselves of the laws of the State of California in connection with their activities relating to their manipulation of LIBOR. Defendants intentionally targeted individuals and entities within this district as well as entered into a conspiracy in which the Defendants knew and intended to cause harm to Plaintiff and others within this district. As a result of the activities described herein, Defendants:

a. Caused damage to the residents of the State of California and this district;

b. Caused damage in the State of California and within this district by acts or omissions committed both inside and outside of the State of California by regularly doing or soliciting business in the State of California and within this district;

c. Engaged in persistent courses of conduct within the State of California and within this district and/or derived substantial revenue from LIBOR-linked transactions with individuals and entities in the State of California and within the district;

d. Committed acts or omissions that they knew or should have known would cause damage (and did, in fact, cause such damage) in the State of California and within this district while regularly doing or soliciting business in the State of California and within this district;

21. The conspiracy described herein adversely affected Plaintiff.

22. LIBOR is a benchmark rate that impacts a wide range of commercial and consumer transactions and investments, including securities that were invested in, issued by and used by public entities, corporations, and individuals in the State of California and within this district. The State of California has a public interest in protecting its residents and taxpayers from financial fraud and manipulation that adversely impacts its residents and taxpayers. The State of California has a public interest in maintaining a business environment free of fraud and antitrust violations. Without enforcing the federal antitrust laws and the antitrust laws and common law of the State of California, companies that violate the law will go unpunished. Defendants knew that commerce in the State of California and within this district would be adversely affected by implementing their conspiracy.

23. This Court has personal jurisdiction over all of the Defendants by virtue of their business activities in this jurisdiction. All of the Defendants

conduct substantial business within the State of California and many of them maintain a large office presence in the Southern District of California.

III. PARTIES

A. Plaintiff

24. Plaintiff **San Diego Association of Governments** ("Plaintiff" or "SANDAG") is a legislatively-created regional government agency. It is governed by a Board of Directors composed of mayors, councilmembers, and county supervisors from each of the 19 local governments in the San Diego County region, including the cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, and San Diego County. Supplementing these voting members are nine advisory representatives, including the California Department of Transportation (Caltrans), Metropolitan Transit Authority, North County Transit District, Imperial County, U.S. Department of Defense, San Diego Unified Port District, San Diego County Water Authority, Southern California Tribal Chairmen's Association, and Mexico (Consulate General of Mexico). SANDAG serves as a forum for regional decision-making, obtains and allocates resources, engineers and builds public transportation, administers state and local tax programs, and has the authority to issue bond instruments.

25. SANDAG has invested in financial instruments the rates of return of which were tied to LIBOR. For example, SANDAG issues municipal bonds to fund public projects in anticipation of tax and other revenues and for other purposes. Portions of the proceeds from certain of these bond issuances may have been invested in Municipal Derivatives that were tied to LIBOR with one or more of the Defendants and/or other entities.

B. <u>Defendants</u>

26. Defendant **Bank of America Corporation** is a Delaware corporation headquartered in Charlotte, North Carolina. Defendant **Bank of America, N.A.** is a federally-chartered national banking association headquartered in Charlotte, North Carolina and is an indirect, wholly-owned subsidiary of Defendant Bank of America Corporation. Defendant Bank of America Corporation is the second-largest bank holding company in the United States by assets. Bank of America Corporation and Bank of America, N.A. are referenced collectively in this Complaint as "**Bank of America**" or the "**Bank of America Defendants**."

27. Defendant **Bank of Tokyo-Mitsubishi UFJ Ltd. ("Tokyo-Mitsubishi")** is a Japanese company headquartered in Tokyo, Japan. Tokyo-Mitsubishi is the largest bank in Japan, which was established on <u>January 1, 2006</u> with the merger of the Bank of Tokyo-Mitsubishi, Ltd. and UFJ Bank Ltd. The bank serves as the core retail and commercial banking operation for the Mitsubishi UFJ Financial Group.

28. Defendant **Barclays Bank plc ("Barclays")** is a British public limited company headquartered in London, England. Barclays is a British multinational banking and financial services company headquartered in London, United Kingdom. Barclays is one of the largest financial institutions in the world.

29. Defendant **Citigroup, Inc.** is a Delaware corporation headquartered in New York, New York. Defendant **Citibank, N.A.** is a federally-chartered national banking association headquartered in New York, New York and is a wholly-owned subsidiary of Defendant Citigroup, Inc. Citigroup, Inc. was formed from one of the largest mergers in history by combining the banking giant Citicorp and financial conglomerate Travelers Group. **Citibank, N.A.** is the banking arm of Defendant Citigroup, Inc. Citibank, N.A. is the third largest retail bank in the United States based on deposits, and it has Citibank branded branches in countries throughout the world. Defendants Citigroup, Inc. and Citibank, N.A. are

referenced collectively in this Complaint as “**Citigroup**” or the “**Citigroup Defendants**.”

30. Defendant **Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A. (“Rabobank”)** is a financial services provider headquartered in Utrecht, the Netherlands. Rabobank is a financial services provider with offices worldwide. Rabobank is a global leader in Food and Agri financing and in sustainability-oriented banking. Rabobank comprises 141 independent local Dutch Rabobanks, a central organization (Rabobank Nederland), and a large number of specialized international offices and subsidiaries.

31. Defendant **Credit Suisse Group AG (“Credit Suisse”)** is a Swiss company headquartered in Zurich, Switzerland. Defendant Credit Suisse is a Swiss multinational financial services company with more than 250 branches in Switzerland and operations in more than 50 countries. Defendant Credit Suisse provides companies, institutional clients and high-net-worth private clients worldwide, as well as retail clients in Switzerland, with advisory services, comprehensive solutions, and products.

32. Defendant **Deutsche Bank AG (“Deutsche Bank”)** is a German financial services company headquartered in Frankfurt, Hesse, Germany. Defendant Deutsche Bank is a global banking and financial services company that conducts business across the world. Defendant Deutsche Bank offers financial products and services for corporate and institutional clients along with private and business clients. Services include sales, trading, research and origination of debt and equity; mergers and acquisitions; risk management products, such as derivatives, corporate finance, wealth management, retail banking, fund management, and transaction banking.

33. Defendant **HSBC Holdings plc** is a United Kingdom public limited company headquartered in London, England. Defendant **HSBC Bank plc** is a United Kingdom public limited company headquartered in London, England and is

a wholly-owned subsidiary of Defendant HSBC Holdings plc. HSBC Bank plc is one of the four major clearing banks in the United Kingdom. HSBC Bank plc's business ranges from personal finance and commercial banking, to private banking, consumer finance as well as corporate and investment banking. Defendants HSBC Holdings plc and HSBC Bank plc are referenced collectively in this Complaint as "**HSBC**" or the "**HSBC Defendants**."

34. Defendant **JPMorgan Chase & Co.** is a Delaware corporation headquartered in New York, New York. Defendant **JPMorgan Chase Bank, N.A.** is a federally-chartered national banking association headquartered in New York, New York and is a wholly-owned subsidiary of Defendant JPMorgan Chase & Co. JPMorgan Chase Bank, N.A. is the largest bank in the United States by assets. JPMorgan is involved in all aspects of the financial markets, including investment banking, asset management, private banking, and private wealth management. Defendants JPMorgan Chase & Co. and JPMorgan Chase Bank, National Association are referenced collectively in this Complaint as "**JPMorgan**" or the "**JPMorgan Defendants**."

35. Defendant **Lloyds Banking Group plc ("Lloyds")** is a United Kingdom public limited company headquartered in London, United Kingdom. Defendant Lloyds was formed in 2009 through the acquisition of Defendant **HBOS plc ("HBOS")** - a United Kingdom banking and insurance company headquartered in Edinburgh, Scotland - by Lloyds TSB Bank plc. Defendant Lloyds' activities are organized into four business divisions including Retail Banking, Wholesale, Life, Pensions & Insurance, and Wealth & International. Defendant Lloyds' extensive operations span the globe including the United States, Europe, Middle East and Asia.

36. Defendant **Royal Bank of Canada ("RBC")** is a Canadian company headquartered in Toronto, Canada. Defendant RBC is the largest financial institution in Canada, as measured by deposits, revenues, and market

capitalization. Defendant RBC serves seventeen million clients and has 80,100 employees worldwide.

37. Defendant **The Norinchukin Bank ("Norinchukin")** is a Japanese bank headquartered in Tokyo, Japan. Defendant Norinchukin is a Japanese cooperative bank largely serving agricultural, fishing and forestry cooperatives. Defendant Norinchukin is one of Japan's largest institutional investors and has a reputation as Japan's largest hedge fund.

38. Defendant **Société Générale, S.A. ("SocGen")** is a French corporation with its principal place of business in Paris, France. Defendant SocGen is a large European bank and a major financial services company. Defendant SocGen's three main divisions are Retail Banking & Specialized Financial Services, Corporate and Investment Banking and Global Investment Management & Services. Defendant SocGen is present in over 33 countries across Europe, the Americas and Asia.

39. Defendant **The Royal Bank of Scotland Group plc** ("RBS") is a United Kingdom public limited company headquartered in Edinburgh, Scotland. Defendant RBS is a British banking and insurance holding company. Defendant RBS provides a wide variety of banking services ranging from personal and business banking, private banking, insurance and corporate finance throughout its operations across the world, including Europe, North America and Asia.

40. Defendant **UBS AG** ("UBS") is a Swiss company based in Basel and Zurich, Switzerland. Defendant UBS provides investment banking, asset management, and wealth management services for private, corporate, and institutional clients worldwide.

41. Defendant **Portigon AG, f/k/a WestLB AG ("WestLB AG"),** is a German joint stock company headquartered in Dusseldorf, Germany. Defendant **Westdeutsche ImmobilienBank AG** is a German company headquartered in Mainz, Germany. Westdeutsche ImmobilienBank AG is currently a wholly-owned

subsidiary of Erste Abwicklungsanstalt and formerly a wholly-owned subsidiary of WestLB AG. Defendant WestLB AG is a European commercial bank which is partially owned by the German state of North Rhine-Westphalia. WestLB AG was formerly a Landesbank, one of a group of state-owned banks that is unique to Germany. These banks are regionally organized and engage predominantly in wholesale banking. Defendants WestLB AG and Westdeutsche ImmobilienBank AG are referenced collectively in this Complaint as "**WestLB**" or the "**WestLB Defendants**."

42. Defendants Bank of America, Tokyo-Mitsubishi, Barclays, Citigroup, Rabobank, Credit Suisse, Deutsche Bank, HSBC, JPMorgan, Lloyds, HBOS, RBC, Norinchukin, SocGen, RBS, UBS, and WestLB (collectively, "Defendants") were members of the BBA's USD-LIBOR panel during the Relevant Period.

C. Unnamed Co-Conspirators

43. At all relevant times, other corporations, banks, investment companies, and other individuals and entities willingly conspired with Defendants in their unlawful and illegal conduct against Plaintiff. Numerous individuals and entities participated actively during the course of and in furtherance of the scheme described herein. The individuals and entities acted in concert by joint ventures and by acting as agents for principals, in order to advance the objectives of the scheme to benefit Defendants and themselves through the manipulation of LIBOR. In particular, certain individuals and entities agreed and conspired to manipulate and/or artificially suppress the LIBOR rate and the rate of other global benchmark interest rates to increase their profits to the detriment of Plaintiff. All averments herein against named Defendants are also averred against these unnamed co-conspirators as though set forth at length.

D. Agents and Co-Conspirators

44. At all times relevant to this complaint Defendants, and each of them, were acting as the agents, employees, and/or representatives of each other, and

were acting within the course and scope of their agency and employment with the full knowledge, consent, permission, authorization and ratification, either express or implied, of each of the other Defendants in performing the acts alleged in this complaint.

45. Each of the Defendants have participated, as members of the conspiracy, and have acted with or in furtherance of said conspiracy, or aided or assisted in carrying out the purposes of the conspiracy, and have performed acts and made statements in furtherance of the conspiracy and other violations of federal and California law. Each of the Defendants acted both individually and in alignment with other Defendants with full knowledge of their respective wrongful conduct. As such, the Defendants conspired together, building upon each other's wrongdoing, in order to accomplish the acts outlined in this complaint. Defendants are individually sued as principals, participants, and aiders and abettors in the wrongful conduct complained of, the liability of each arises from the fact that each has engaged in all or part of the improper acts, plans, schemes, conspiracies, or transactions complained of herein.

IV. <u>FACTUAL ALLEGATIONS</u>

A. <u>The London Interbank Offered Rate Defined</u>

46. The London Interbank Offered Rate ("LIBOR") is a global benchmark interest rate that is set every day based on submissions from the member banks of the British Bankers' Association ("BBA"). The Defendants in this case are those member banks who reported false borrowing rates to the BBA and who conspired to manipulate LIBOR by entering into agreements with each other to provide false submissions to the BBA. LIBOR is intended to represent the true cost of borrowing between banks. Since banks are traditionally in the business of lending and borrowing money, they have the best knowledge of what would be a fair interest rate for inter-bank loans. LIBOR was believed to represent, on a daily basis, what was accepted by the global financial system as the

true cost of borrowing between financial institutions. LIBOR is used as a benchmark for other borrowers. LIBOR-linked interest rates are commonly described as LIBOR plus X number of basis points. Since LIBOR is the benchmark, however, the Defendants' manipulation of LIBOR has made every interest rate linked to LIBOR unreliable and the product of Defendants' wrongdoing.

47. There are 150 different LIBOR rates calculated for ten different currencies on a daily basis by Thomson Reuters for the BBA for 15 borrowing periods ranging from overnight to 12 months. LIBOR is set by the BBA and its member banks. The BBA defines LIBOR as:

> *The rate at which an individual Contributor Panel bank could borrow funds, were it to do so by asking for and then accepting inter-bank offers in reasonable market size, just prior to 11:00 a.m. London time.*

48. This has been the operational definition of LIBOR since approximately 1998. The LIBOR for a given currency is the result of a calculation based upon submissions from a panel of banks for that currency (the "Contributor Panel") selected by the BBA banks. The Contributor Panel for the US Dollar LIBOR from at least 2005 through 2010 comprised of 16 banks. Presently, there are 18 banks on the US Dollar Contributor Panel. The 16 banks that were part of the U.S. Dollar Contributor Panel from 2005 through 2010 were:

- Bank of America
- Bank of Tokyo-Mitsubishi UFJ
- Barclays
- Citibank
- Credit Suisse
- Deutsche Bank
- HSBC
- JPMorgan Chase

- Lloyds
- Rabobank
- Royal Bank of Canada
- Société Générale
- Norinchukin
- The Royal Bank of Scotland
- UBS
- WestLB

49. In 2011, WestLB left its position as a LIBOR member bank of the US Dollar Contributor Panel. That same year, BNP Paribas, Credit Agricole CIB and Sumitomo Mitsui Banking Corporation Europe Ltd. ("SMBCE") became LIBOR member banks when they joined the US Dollar Contributor Panel. This transition occurred right around the time the investigation into widespread LIBOR manipulation by the Defendants started to be disclosed to the public.

50. The BBA's activities with the member banks in setting LIBOR for various currencies reflect a global rate-setting cartel. As one commentator has noted, "LIBOR is not a real market rate of interest and is instead set by a cartel of mostly foreign banks operating in London with little or no oversight and no transparency. . . . The Wall Street Journal reported that the BBA is hesitant to change how LIBOR is calculated because it is worried about legal liability which is not a surprise. If the BBA admits that LIBOR isn't a market rate but a cartel rate that was established through price fixing, it will be subject to global lawsuits resulting from fraudulent behavior and misrepresentations. The likelihood of the BBA reforming itself, providing transparency and giving up its cartel monopoly is very low given the astronomical liability that will result."[14] Indeed, the BBA

[14] http://www.thesunshinereport.net/marksunshine/?p=36, last accessed April 30, 2012.

directly profits from the usage of LIBOR. Since 2009, it has operated BBA LIBOR, Ltd., which earns revenue from licensing the rate.

51. The BBA describes itself on its website as "the leading trade association for the U.K. banking and financial services sector. We speak for over 200 member banks from 60 countries on the full range of U.K. and international banking issues."[15] The Defendants are among the member banks of the BBA. As the BBA itself concedes, it is not a regulatory body and has no regulatory function.[16] Its activities are not overseen by any U.K. or foreign regulatory agency. It is governed by a board of member banks that meets four times each year. The board is composed of senior executives from twelve banks, including Defendants Barclays Bank plc, Citibank NA, Credit Suisse, Deutsche Bank AG, HSBC Bank plc, J.P. Morgan Europe Ltd., and the Royal Bank of Scotland plc.[17] "This is a quaint, insider club which is clearly not fit for the 21st century," said Richard Werner, a finance professor at the University of Southampton, England.[18]

52. Commencing in January of 1986, the BBA began disseminating LIBOR, initially in three currencies: U.S. dollars, Japanese Yen, and British pound sterling; LIBOR is now disseminated for ten currencies: the foregoing three, as well as the Australian dollar, the Canadian dollar, the New Zealand dollar, the Danish krone, the Euro, the Swiss Franc, and the Swedish krona.

53. LIBOR is a daily benchmark interest rate at which designated contributor panel banks report that they can borrow unsecured funds from other banks in the London wholesale money market for fifteen different maturities

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[15] http://www.bba.org.uk/about-us, last accessed on April 30, 2012.

[16] http://www.bba.org.uk/blog/article/bba-repeats-commitment-to-bba-libor, last accessed on April 30, 2012

[17] http://www.bba.org.uk/about-us, last accessed on April 30, 2012.

[18] http://www.bloomberg.com/news/2012-02-21/ubs-turning-whistleblower-in-libor-probe-pressures-rivals.html, last accessed on April 30, 2012.

ranging from overnight to one year. As "the primary benchmark for short term interest rates globally,"[19] LIBOR has occupied (and continues to occupy) a crucial role in the operation of financial markets. For example, LIBOR is commonly used as the floating rate on interest rate swaps; market participants commonly set the interest rate on floating-rate notes as a spread against LIBOR (e.g., "LIBOR + [X] bps")[20] and use LIBOR as a basis to determine the correct rate of return on short-term fixed-rate notes (by comparing the offered rate to LIBOR).

54. LIBOR affects the pricing of trillions of dollars' worth of financial transactions. In a May 21, 2009 press release, the BBA called LIBOR "the world's most important number."[21] Accordingly, it is well-established among market participants that confidence in LIBOR "matters, because the rate system plays a vital role in the economy."[22]

55. As the CFTC's Order related to UBS stated:

> LIBOR is the most widely used benchmark interest rate throughout the world. LIBOR is intended to be a barometer to measure strain in money markets and is often a gauge of the market's expectation of future central bank interest rates. Approximately $350 trillion of notional swaps and $10 trillion of loans are indexed to LIBOR. LIBOR also is the basis for settlement of interest rate futures and options contracts on many of the world's major futures and options exchanges, including the one-month and three-month Eurodollar futures contracts on the Chicago Mercantile Exchange ("CME"). Moreover, LIBOR is fundamentally critical to financial markets and has an enormously widespread impact on global markets and consumers.

UBS CFTC at 6.

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[19] http://www.bbalibor.com/bbalibor-explained/the-basics, last accessed on April 19, 2012.

[20] The term "bps" stands for basis points. 100 basis points equal 1%.

[21] http://www.bbalibor.com/news-releases/bba-libor-the-worlds-most-important-number-now-tweets-daily.

[22] Carrik Mollenkamp and Mark Whitehouse, "Study Casts Doubt on Key Rate --- WSJ Analysis Suggests Banks May Have Reported Flawed Interest Data for Libor," *The Wall Street Journal*, May 29, 2008.

56. The review of LIBOR conducted by Marvin Wheatley, the managing director of the FSA, at the request of the British Government, assumed that LIBOR was the benchmark for 50% of certain financial instruments: floating rate notes, interest rate swaps, and forward rate agreements.[23]

57. Each of the ten currencies for which a LIBOR rate is set is overseen by a separate LIBOR panel created by the BBA. During the Relevant Period, designated contributing panels ranged in size from eight banks for Australian dollar, Swedish krona, Danish krone, and New Zealand dollar panels to sixteen banks for U.S. dollar, British pound sterling, Euro, and Japanese yen panels. There is substantial overlap in membership among the panels. For example, during the Relevant Period, nine of the sixteen banks that served on the U.S. dollar panel also served on the Japanese yen, Swiss franc and Euro LIBOR panels.[24] Similarly, thirteen banks participated on both the dollar and yen LIBOR panels[25] and eleven banks participated on both the U.S. dollar and Swiss franc LIBOR panels.[26] It is a requirement of membership of a LIBOR contributor panel that the bank is regulated and authorized to trade on the London money market. As the BBA recently told Bloomberg: "As all contributor banks are regulated, they are responsible to their regulators, rather than us."[27]

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[23] The Wheatley Review of LIBOR: Final Report (Sept. 2012), available at http://www.hm-treasury.gov.uk/wheatley_review.htm (last visited April 16, 2013).

[24] Those banks are Bank of Tokyo, Barclays, Citibank, Deutsche Bank, HSBC, JP Morgan Chase, Lloyds, Rabobank, RBS, and UBS

[25] Those banks are Bank of America, Bank of Tokyo, Barclays, Citibank, Deutsche Bank, HSBC, JP Morgan Chase, Lloyds, Rabobank, RBS, Société Générale (beginning in 2009), UBS, and West LB.

[26] Those banks are Bank of Tokyo, Barclays, Citibank, Credit Suisse, Deutsche Bank, HSBC, JP Morgan Chase, Lloyds, Rabobank, RBS, and UBS.

[27] http://www.bba.org.uk/blog/article/bba-repeats-commitment-to-bba-libor, last accessed on April 30, 2012.

58. In setting LIBOR, each member is asked the same question: "*At what rate could you borrow funds, were you to do so by asking for and then accepting inter-bank offers in a reasonable market size just prior to 11 a.m. London time?*" In response to that question, each member of the Contributor Panel submits its rates every London business day through electronic means to Thomson Reuters, as an agent for the BBA, by 11:10 a.m. London time. Once each Contributor Panel bank has submitted its rate, the contributed rates are ranked. The highest and lowest quartiles are excluded from the calculation, and the middle two quartiles are averaged to formulate the resulting LIBOR "fix" or "setting" for that particular currency and maturity. By removing outliers from the algorithm, the formula theoretically eliminates any abnormal rates so that the final LIBOR rate is a more accurate reflection of actual interest rates being charged in the market. As confirmed by the Department of Justice and the CFTC and admitted to by Barclays, LIBOR could not be manipulated without a concerted effort by the members of the BBA.

59. On its website, the BBA explains "a bank will know what its credit and liquidity risk profile is from rates at which it has dealt and can construct a curve to predict accurately the correct rate for currencies or maturities in which it has not been active." The banks informed the BBA of their costs of borrowing funds at different maturity dates (*e.g.*, one month, three months, six months). Contributed rates are ranked in descending order and the arithmetic mean of only the middle two quartiles is used to formulate the resulting BBA LIBOR calculation for that particular currency and maturity.[28]

60. Thomson Reuters calculates and publishes the rates each business day by approximately 11:30 a.m. London Time. Fifteen maturities (or "tenors") are quoted for each currency, ranging from overnight to twelve months. The

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[28] http://www.bbalibor.com/technical-aspects/setting-bbalibor, last accessed March 30, 2012.

published rates are made available worldwide by Thomson Reuters and other data vendors through electronic means and through a variety of information sources. In addition to the LIBOR fix resulting from the calculation, Thomson Reuters publishes each Contributor Panel bank's submitted rates along with the names of the banks.

61. The Defendant LIBOR member banks' method for reporting their purported interbank offered rate is self-certifying and not transparent. No regulatory agency oversees the setting of LIBOR by the BBA and its members. The resultant rates are not filed with, or subject to the approval of, any regulatory agency. The BBA has been quoted as saying it "calculates and produces BBA Libor at the request of our members for the good of the market."[29]

62. The LIBOR-setting process was designed to proceed in accordance with the BBA LIBOR panel rules. Three key panel rules described below operated to make the LIBOR-setting process a purportedly competitive process that produced competitively determined daily LIBOR rates and established a daily contest between the panel banks to signal their relative ranking in terms of credit risk, access to funding, and liquidity profile.

63. The first key panel rule required each of the panel banks to independently exercise its good faith judgment each day about the interest rate that it would be required to pay, based upon its own expert knowledge of market conditions, including supply and demand conditions and the panel bank's own competitive posture as a borrower within the market for interbank loan funds. Through the mechanism of individual submissions reflecting each submitting bank's honest competitive posture as a borrower each day, the composite LIBOR should have reflected, and moved from day to day based upon, actual competitive conditions in the London interbank loan market.

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[29] http://www.businessweek.com/news/2012-03-06/libor-links-deleted-as-bank-group-backs-away-from-tarnished-rate, last accessed on April 30, 2012.

64. This panel rule meant that each bank's LIBOR submissions should accurately reflect the estimated costs of the bank's borrowing costs in the interbank lending market—rather than represent an artificial number generated to benefit the bank's trading positions, enhance the bank's reputation as creditworthy, or something else. As Defendants Barclays, UBS, and RBS admitted:

> The basis for a Contributor Panel bank's submission, according to the BBA, must be the rate at which members of the bank's staff primarily responsible for management of a bank's cash, rather than a bank's derivative trading book, consider that the bank can borrow unsecured interbank funds in the London money market. Further, according to the BBA, a Contributor Panel bank may not contribute a rate based on the pricing of any derivative instrument. In other words, a Contributor Panel bank's LIBOR submissions should not be influenced by its motive to maximize profit or minimize losses in derivative transactions tied to LIBOR.

Barclays DOJ ¶ 6. *See* UBS DOJ ¶ 7; RBS DOJ ¶ 7.

65. The second key panel rule mandated that each panel bank's daily submissions would remain confidential until after the calculation and publication of the daily LIBOR rates. Adherence to this rule would prevent collusion and ensure that each panel bank's submission would be independent of the others, and therefore reflect only that panel bank's independent expert judgment concerning its own competitive posture as a borrower within the market. As Defendants Barclays, UBS, and RBS have admitted: "According to the BBA, from at least 2005 to the present, each Contributor Panel bank must submit its rate without reference to rates contributed by other Contributor Panel banks." Barclays DOJ ¶ 6, *see* UBS DOJ ¶ 7, RBS DOJ ¶ 7.

66. The third key panel rule mandated that upon the publication of each day's LIBOR, the BBA, through Thomson Reuters, simultaneously published the individual rates submitted in the LIBOR-setting process for each panel bank, currency and tenor for that day. This third rule made the process and the

individual panel bank submissions transparent on an ex post basis, to the capital markets and the panel banks themselves.

67. Moreover, this third rule, operating in conjunction with the first two rules, were created so that the LIBOR-setting process would be a competitive process. Because the capital markets view the funding costs of the panel banks as reflective of their relative creditworthiness and financial strength, the daily disclosure of the panel bank LIBOR submissions signaled each panel bank's creditworthiness and financial strength to the market. Lower funding costs reflected greater creditworthiness and financial strength, and vice versa.

68. Each panel bank was in competition with the others to submit the lowest honest funding cost estimate possible. By creating this incentive to signal the lowest honest funding cost, this third rule was designed to ensure that the LIBOR setting process produce, as the BBA termed it, "a unique snapshot of competitive funding costs."

69. These three rules were the safeguards ensuring that LIBOR would reflect the forces of competition in the London interbank loan market. Collusion to submit artificial and coordinated rates not only violated the three rules but removed LIBOR's linkage to competition.

B. Defendants' Widespread Conspiracy to Manipulate LIBOR is Supported by Substantial Evidence

70. Beginning in at least August of 2007 and extending until as late as March of 2011 (the "Relevant Period"), Defendants conspired to artificially suppress LIBOR below the levels at which it would have been set had Defendants accurately reported their true borrowing costs to the BBA.

71. Plaintiff's allegations that Defendants suppressed LIBOR are supported by (i) Defendants' strong financial and economic incentives to mask their true borrowing costs and to reap unjustified profits by setting artificially low interest rates on LIBOR-based financial instruments that Plaintiff and other

investors purchased; (ii) the settlement by Barclays with U.S. and U.K. regulators and the documents and other evidence uncovered as part of Barclays' agreement which implicates not only Barclays but the other Defendants in the LIBOR conspiracy; (iii) UBS's application for amnesty from government prosecution relating to its involvement in the LIBOR conspiracy, the information it provided as part of its cooperation with authorities, and its subsequent settlement with U.S., U.K., and Swiss regulators; (iv) RBS's settlement with U.S. and U.K. regulators; (v) the results of the investigation of LIBOR manipulation by Canadian regulatory authorities and the refusal of BBA member banks, such as Defendant RBS, to produce documents regarding LIBOR to the Canadian authorities, even if such a refusal was in violation of a court order; (vi) the pending arrests and indictments of individual traders employed by the Defendants for their involvement in the LIBOR manipulation conspiracy; (vii) reports of efforts by several BBA member banks to jointly seek a group settlement for their involvement in the LIBOR manipulation conspiracy; (viii) other revelations in connection with the numerous governmental investigations by prosecutors and regulatory authorities from across the world into potential manipulation of USD-LIBOR and LIBOR for other currencies; and (ix) economic and financial analyses that are publically available that were either conducted by academics or by consulting experts retained in similar litigation relating to LIBOR manipulation.

72. These economic and financial analyses were able to use statistical analysis and other well-recognized economic, financial, mathematical and statistical methodologies to demonstrate the existence of a LIBOR manipulation conspiracy and the involvement of all of the Defendants in that conspiracy. An analysis of statistical data relating to the Probability of Default ("PD"), a measure of a financial institution's likelihood to default on its financial obligations, shows that, during the Relevant Period, the LIBOR rates deviated from the PD to a statistically significant degree. The PD data was provided by Kamakura Risk

Information Services, a third party data provider. Economic analyses also compared LIBOR's behavior during the Relevant Period with other well-accepted contemporaneous measures of Defendants' borrowing costs and found significant deviations, as well as a notable tendency of Defendants' daily LIBOR submission to "bunch" near the bottom quartile of the collection of reported rates used to determine LIBOR (showing the Defendants gaming the system in which the highest and lowest quartiles are removed from the average). However, it was not until the announcement of the March 2011 government investigations that there was a reasonable basis for believing the Defendants were engaging in intentional fraud and were conspiring to manipulate LIBOR.

C. Defendants Had Financial Incentives to Conspire to Manipulate LIBOR

73. The Defendant LIBOR member banks had independent and substantial incentives to manipulate LIBOR. As set forth in this Complaint, there is substantial evidence of a conspiracy amongst the Defendants to manipulate LIBOR since, at least, August of 2007. In the midst of the financial crisis that began in 2007, the Defendants were all motivated to manipulate LIBOR for their own gain. There were two main financial incentives for the Defendants to conspire to manipulate LIBOR.

74. First, the banks were motivated, particularly given investors' serious concerns over the stability of the market in the wake of the 2007 financial crisis, to understate their borrowing costs - and thus understate the level of risk associated with that bank. Moreover, because no one bank would want to stand out as bearing a higher degree of risk than its fellow banks, each bank shared a powerful incentive to collude with its co-conspirators to ensure it was not the odd man out. Analysts at Citigroup Global Markets - a subsidiary of Defendant Citigroup - acknowledged in an April 10, 2008 report:

> "[T]he most obvious explanation for LIBOR being set so low is the prevailing fear of being perceived as a weak hand in this fragile market environment. If a bank is not held to transact at its posted LIBOR level, there is little incentive for it to post a rate that is more reflective of real lending levels, let alone one higher than its competitors. Because all LIBOR postings are publicly disclosed, any bank posting a high LIBOR level runs the risk of being perceived as needing funding. With markets in such a fragile state, this kind of perception could have dangerous consequences."

75. Analysts and strategists at other banks also confirmed that the Defendant banks conspired to manipulate LIBOR. The Defendants had to conspire in advance of reporting to the BBA because if one of the banks publically posted higher borrowing rates than the other banks and had to reduce them dramatically afterwards to follow the lead of the other Defendant banks, that would have raised even more red flags.

76. Second, by artificially suppressing LIBOR, banks paid lower interest rates on LIBOR-based financial instruments they sold to investors. During all times alleged herein, the Defendants (all of whom are major financial institutions) were largely in positions that required them to make payments to counterparties based on LIBOR. Therefore, an artificially suppressed LIBOR would significantly reduce the amount of monies Defendants were required to pay to others, such as Plaintiff. For example, in 2009, Defendant Citibank, N.A. reported it would make $936 million in net interest revenue if rates would fall by 25 basis points (0.25%) per quarter over the next year and $1.935 billion if rates fell 1% instantaneously. The JPMorgan Defendants reported that if interest rates increased by 1%, they would lose over $500 million in interest revenue. Defendants HSBC and Lloyds also estimated that interest rate changes of less than 1% would affect their profits by hundreds of millions of dollars in 2008 and 2009. The size of the positions, in the billions and trillions of dollars, means that minute changes in the rate, even a fraction of a single percentage point would result in hundreds of millions of dollars in illegal and improper profits for Defendants. By artificially suppressing

LIBOR during the time period alleged herein, Defendants collectively reaped billions of dollars in illicit unearned net interest revenues.

77. A bank that submits high LIBORs runs the risk of being perceived as a weak institution, which can lead to negative consequences for the bank. As the DOJ explained, and UBS admitted:

> Because a bank's LIBOR contributions, even if they are not based entirely on actual money market transactions, should correspond to the cost at which the bank perceives that it can borrow funds in the relevant market, ***a bank's LIBOR contributions may be viewed as an indicator of a bank's creditworthiness. If a bank's LIBOR contributions are relatively high, those submissions could suggest that the bank is paying more than others to borrow funds. Thus, a bank could be perceived to be experiencing financial difficulties because lenders were charging higher rates to that bank.***

UBS DOJ ¶98-99 (emphasis added).

78. The instructions at UBS to suppress USD LIBOR to stay within the pack and err on the low side "were issued, at least in significant part, because of concerns that if UBS submitted higher LIBOR rates relative to other banks, UBS could attract negative attention in the media."[30] In so acting, UBS "sought to avoid negative media attention and, relatedly, sought to avoid creating an impression that it was having difficulty obtaining funds."[31] To the extent those directions from UBS management "were motivated by reputational concerns," they "were inconsistent with the definition of LIBOR."[32]

79. On September 22, 2008, a UBS employee wrote in an electronic chat that "the real cash market isn't trading anywhere near LIBOR," and he suspected the reason was that Banks "undervalue [LIBOR] in times like this . . . so as to not show where they really pay in case it creates headlines about that bank being desperate for cash." UBS DOJ ¶ 101.

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[30] UBS DOJ SOF ¶ 100.

[31] *Id.*

[32] *Id.*

80. Similarly, the CFTC found that Barclays' misconduct in knowingly submitting false LIBOR quotes stemmed from its desire "to protect [its] reputation against what it believed were negative and unfair media and market perceptions that Barclays had a liquidity problem based in part on its high LIBOR submissions."[33]

a. The DOJ observed that Barclays' improper submissions "began in approximately late August 2007," shortly after Barclays "twice drew on the Bank of England's emergency liquidity facility (known as the 'window'), borrowing approximately £1.6 billion the second time."[34] The DOJ further explained:

> News articles about the withdrawals in late August 2007 noted a decline in Barclays's share price and questioned Barclays's liquidity position, while Barclays explained publicly that the visits to the window were due to technical glitches. Meanwhile, because of the onset of the financial crisis, there was diminished liquidity in funding markets, and Barclays set certain of its LIBOR submissions relatively high compared to other Contributor Panel banks. In early September 2007, Barclays received negative press coverage concerning Barclays's high LIBOR submissions in Sterling, Euro, and Dollar. A news article questioned Barclays's liquidity position, in light of Barclays's high LIBOR submissions and its visits to the Bank of England's window, and noted that Barclays's share price had fallen.[35]

b. Senior managers at Barclays "expressed concern about the negative publicity."[36] Managers on Barclays' money-markets desk and in its Treasury department "who gave the instruction to submit lower LIBORs, which resulted in improperly low LIBOR submissions," aimed "to avoid inaccurate, negative attention about Barclays's financial health as a result of its high LIBOR

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[33] Barclays CFTC at 19.

[34] Barclays DOJ SOF ¶39.

[35] *Id.*

[36] *Id.* ¶40.

submissions relative to other banks."[37] They "wanted to prevent any adverse conclusions about Barclays's borrowing costs, and more generally, its financial condition, because they believed that those conclusions would be mistaken and that other Contributor Panel banks were submitting unrealistically low Dollar LIBORs."[38]

c. Because those managers "sought to avoid what they believed would be an inaccurate perception that Barclays was not in good financial shape when compared to its peers," Barclays "engaged in this misconduct in order to reduce the reputational risk associated with proper, higher LIBOR submissions."[39] In other words, the DOJ explained—borrowing from Barclays employees' comments in internal communications—***"the purpose of the strategy of under-reporting Dollar LIBORs was to keep Barclays's 'head below the parapet' so that it did not get 'shot' off."***[40]

81. Analysts at Citigroup Global Markets—a subsidiary of Defendant Citigroup—similarly acknowledged in an April 10, 2008 report:

> [T]he most obvious explanation for LIBOR being set so low is the prevailing fear of being perceived as a weak hand in this fragile market environment. If a bank is not held to transact at its posted LIBOR level, there is little incentive for it to post a rate that is more reflective of real lending levels, let alone one higher than its competitors. Because all LIBOR postings are publicly disclosed, any bank posting a high LIBOR level runs the risk of being perceived as needing funding. With markets in such a fragile state, this kind of perception could have dangerous consequences.[41]

82. Strategists at entities affiliated with other Defendants likewise confirmed these incentives. Echoing Peng's sentiment, William Porter, credit

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[37] *Id.*

[38] *Id.*

[39] *Id.*

[40] *Id.* (emphasis added).

[41] Scott Peng, Chintan (Monty) Gandhi, & Alexander Tyo, "Special Topic: Is LIBOR Broken?," April 10, 2008.

strategist at Credit Suisse, said in April 2008 that he believed the three-month USD-LIBOR was 40 basis points below where it should be.[42] And the next month, Tim Bond, head of asset-allocation research of Barclays Capital—a subsidiary of Defendant Barclays—observed that banks routinely misstated borrowing costs to the BBA to avoid the perception that they faced difficulty raising funds as credit markets seized up.[43]

83. The only way for every Defendant to appear financially strong through low LIBOR submissions without drawing unwanted media and regulatory attention was for all Defendants to collude to suppress as a pack. That is because, on the one hand, a bank that submits LIBORs that are above the pack signals its relative weakness and illiquidity to the media and market. As Barclays acknowledged, a bank submitting too high risked sticking its "head above the parapet," which could get it "shot" off by the financial press. Barclays SOF ¶ 43.[44] On the other hand, a bank that submits LIBORs that are lower than the pack risks drawing unwanted media and regulatory attention.

84. An employee of Defendant UBS told UBS's Thomas Hayes, who the DOJ charged with criminal price-fixing, that he would "not set[] libor 7bp away from the truth" because "***<u>i'll get ubs banned if I do that, no interest in that</u>***."[45] Also, a Defendant bank who acted alone to submit lower-than-accurate LIBOR would risk being reported by other Defendant banks who were (or should have been) competing to appear more creditworthy to the market by making truthful

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[42] Carrick Mollenkamp, "Libor Surges After Scrutiny Does, Too," *The Wall Street Journal*, April 18, 2008.

[43] Gavin Finch and Elliott Gotkine, "Libor Banks Misstated Rates, Bond at Barclays Says," *Bloomberg*, May 29, 2008.

[44] Barclays agreed that it would not contest the accuracy of the DOJ Statement of Facts ("Barclays DOJ SOF"). DOJ Non-Prosecution Agreement at 1.

[45] Complaint, *U.S. v. Hayes & Darin*, No. 12 Mag 3229 (Dec. 12, 2012), Exhibit 2 (emphasis added).

LIBOR submissions. However, if all Defendants were colluding to suppress LIBOR, there was less risk that any Defendant would report another Defendant for submitting lower-than-accurate LIBOR.

85. In a June 18, 2008 chat, UBS employees discussed why it was important for LIBOR submissions to neither be too high nor low, but in the middle of the pack:

Trader D:	"...[Senior Manager B] *want us to get in line with the competition by Friday ...*"
Trader Submitter E:	"... *if you are too low you get written about for being too low...if you are too high you get written about for being too high ...* "
Trader D:	"*middle of the pack there is no issue...*"

UBS FSA ¶ 124.

86. Because no one bank would want to stand out as bearing a higher degree of risk than its fellow banks, or as having submitted an artificially low LIBOR, each Defendant shared a powerful incentive to collude with its co-Defendants to ensure it was not the "odd man out." Because all banks wanted to appear financially healthy during the financial crisis, they had a powerful incentive to collude to suppress their LIBOR submissions as a group.

87. Defendants thus possessed reputational and financial incentives to manipulate LIBOR – which, as detailed below, they did.

D. Defendants' LIBOR Manipulation Harmed Numerous Types of Financial Investments

88. LIBOR is used as a benchmark interest rate for many different types of financial instruments, ranging from complex multibillion dollar derivative investment instruments between large institutions to simple consumer loans. LIBOR affects all facets of financial life from the institutional to individual

people. The following is a list of common types of financial instruments that are linked to LIBOR, not including consumer financing, but this list is not exhaustive:

- Forward Rate Agreements
- Interest Rate Swaps
- Inflation Swaps
- Total Return Swaps
- Credit Default Swaps ("CDS")
- Asset Swaps
- Floating Rate Notes
- Syndicated Loans
- Collateralized Debt Obligations ("CDO")
- Options

89. Even financial transactions whose interest rates are not directly tied to LIBOR are also impacted by the LIBOR rate manipulation as alleged. For example, while the interest rate determining the payment on certain financial instruments may not be directly set to LIBOR, the value of the underlying asset could be tied to LIBOR (*e.g.* from student loans to subprime mortgages). Similarly, in determining whether to invest in variable rate financial instruments or fixed rate financial instruments, investors such as Plaintiff conducted comparative analyses between LIBOR-linked variable rates versus fixed rate instruments. The LIBOR manipulated suppressed rate compromised this analysis making the LIBOR-based instrument appear more attractive than the alternative, thereby causing harm to Plaintiff.

90. LIBOR benchmark rates are used to calculate interest rates for Credit Default Swaps and Interest Rate Swaps with an estimated notional value of $350 trillion. The notional value is the nominal or face amount that is used to calculate payments made on that instrument, or the value of a derivative product's underlying assets at the spot (cash) price. Moreover, loans, securities, and abstract

derivative contracts with a notional value of $800 trillion are also tied to LIBOR. This reflects only a portion of the total universe of financial instruments that are linked to LIBOR, which includes interest-bearing investments held by pension funds and other institutional investors.

91. **Forward Rate Agreements** are a type of derivative instrument based on a "forward contract." The contract sets the rate of interest or the currency exchange rate to be paid or received on an obligation beginning at a future start date. The contract will set the rates to be paid or received along with the termination date and notional value. On this type of agreement, it is the differential that is paid on the notional amount of the contract. That payment is made on the effective date of the contract. The reference rate is fixed one or two days before the effective date, depending on the market convention for the particular currency. Payment on a Forward Rate Agreement is only made once at maturity. Forward Rate Agreements can be indexed to LIBOR.

92. **Interest Rate Swaps** are a type of derivative instrument in which two parties agree to exchange interest rate cash flows, based on a specified notional amount from a fixed rate to a floating rate (or vice-versa) or from one floating rate to another, using different benchmarks for the two floating rates. These are highly liquid financial derivatives. Interest rate swaps are commonly used for both hedging and speculating. In an interest rate swap, each party agrees to pay either a fixed or floating rate denominated in a particular currency to the other party at specific periods of time. The fixed or floating rate is multiplied by a notional principal amount. This notional amount is typically not exchanged between counterparties, but is used only for calculating the size of cash flows to be exchanged. The counterparty that is required to pay more on the swap can pay the difference instead of both counterparties exchanging monies. Interest Rate Swaps can be indexed to LIBOR.

93. **Inflation Swaps** are a type of derivative instrument used to transfer inflation risk from one party to another through an exchange of cash flows. In an Inflation Swap, one party pays a fixed rate on a notional principal amount, while the other party pays a floating rate linked to an inflation index. The party paying the floating rate pays the inflation adjusted rate multiplied by the notional principal amount. Inflation Swaps can be indexed to LIBOR.

94. **Total Return Swaps** are a type of derivative instrument based on financial contracts that transfer both the credit and market risk of an underlying asset. These derivatives allow one contracting party to derive the economic benefit of owning an asset without putting that asset on its balance sheet. The other contracting party, which retains the underlying asset on its balance sheet, is, in effect, buying protection against loss on that asset's value. Total Return Swaps can be indexed to LIBOR.

95. **Credit Default Swaps ("CDS")** are a type of over-the-counter ("OTC"), credit-based derivative whereby the seller of the CDS compensates the buyer of the CDS only if the underlying loan goes into default or has another "credit event." The buyer of the CDS makes a series of payments (the CDS "fee" or "spread") to the seller and, in exchange, receives a payoff if the loan defaults. In the event of default, the buyer of the CDS receives compensation (usually the face value of the loan), and the seller of the CDS takes possession of the defaulted loan. However, anyone can purchase a CDS, even buyers who do not hold the loan instrument and who have no direct insurable interest in the loan (these are called "naked" CDS). The CDS fee can be indexed to LIBOR.

96. **Asset Swaps** are a type of derivative instrument in which one investor exchanges the cash flows of an asset or pool of assets for a different cash flow. This is done without affecting the underlying investment position. For instance, if a Defendant wanted to own a particular Euro-denominated bond, but preferred to receive a floating rate US dollar cash flow, the Defendant could

purchase that Euro-denominated bond and then enter into asset swap with another bank or investor to receive US Dollar LIBOR payments (+/- spread) in return for paying a fixed rate coupon in Euros to the bank or investor. This is akin to an interest rate swap except that it is based on the value of a specific asset owned by one of the counterparties. Asset Swaps can be indexed to LIBOR.

97. **Floating Rate Notes** are note obligations in which the amount of money paid by one party to the other is a floating rate that is tied to a benchmark. The interest rate on these floating rate notes adjust at different periods of time based on the terms of the contract. These floating rate notes can be tied to any index but LIBOR is one of the most common benchmarks used for setting the interest rate payments on floating rate notes.

98. **Collateralized Debt Obligations ("CDOs")** are a type of structured asset backed security ("ABS"). CDOs have multiple tranches, or levels of risk, and are issued by "special purpose entities." Investors buy into different tranches which have different levels of risk which correlate to the potential rate of returns on these securities. These instruments are called Collateralized Debt Obligations because they consist of debt obligations, such as subprime mortgages or student loans, that are pooled together to form collateral for the instrument. Each tranche has different exposure to the collateral. Interest and principal payments on CDOs are made in order of seniority, so that junior tranches offer higher coupon payments (and interest rates) or lower prices to compensate for additional default risk; in general, "senior" tranches are considered the safest securities. CDOs can be indexed to LIBOR which sets the amount of money that is paid to CDO investors.

99. **Options** are a type of derivative instrument based on a contract between two parties for a future transaction on an asset. Options can be linked to swaps. For example, an option on a swap is commonly referred to as a "swaption." The buyer of an option gains the right, but not the obligation, to

engage in that future transaction (buy or sell) while the seller of the option is obligated to fulfill the future transaction. The buyer of the option pays a set amount of money to the option seller in order to acquire this option. In general, the option's price is the difference between the asset's reference price and the value of the underlying asset (*i.e.*, a stock, bond, currency contract, or futures contract) plus a spread. Thus, where the underlying asset is indexed to LIBOR, the option's price is impacted by LIBOR.

E. Defendants Colluded with Each Other To Suppress USD LIBOR

100. As alleged herein, the only plausible inference from the empirical evidence is that Defendants conspired to suppress LIBOR between at least August 2007 and May 2010. For example, the empirical evidence from a Eurodollar study shows anomalous divergences during this period between the Eurodollar benchmark and LIBOR submissions. Those divergences are unprecedented before and after this period and not explainable by market fundamentals. Before and after this time period, LIBOR and the Eurodollar benchmark were very closely correlated. During this period, however, Defendants' LIBOR submissions were, on average, approximately 29.4 basis points lower than the Eurodollar benchmark ("Eurodollar spread"). In addition, Defendants' patterns of divergence from the Eurodollar benchmark were very similar to each other during this period, as every Defendant had an average Eurodollar spread within 6 basis points of each other. As many market participants observed, Defendants suppressed as a pack during this period. Other empirical studies show that LIBOR was manipulated during the Relevant Period.

101. In addition to the empirical evidence showing that Defendants colluded, there is also ample direct and inferential evidence that Defendants colluded to suppress LIBOR.

102. During the Relevant Period, Defendants subverted the USD LIBOR setting process by submitting daily USD borrowing rate estimates at rates lower

than those at which they believed they could borrow. These submissions were in violation of the first BBA LIBOR panel rule described above.

103. During the Relevant Period, Defendants also violated the second panel rule described above by routinely sharing amongst themselves, directly and through cash brokers, their planned daily borrowing cost submissions for the purpose of coordinating their submissions to suppress USD LIBOR.

104. Defendants' collusive suppression of USD LIBOR removed the effects of competition from the primary determinant of price for LIBOR-based instruments, and replaced it with a primary determinant of price that was manipulated by Defendants' collusion.

1. Each Defendant Knew Other LIBOR Member Banks Were Manipulating LIBOR

105. Barclays admitted that between August 2007 and January 2009, it often reported suppressed USD LIBOR rates at the direction of its managers. These rates were false because they were lower than what Barclays would have submitted had it honored the definition of LIBOR.

> From approximately August 2007 through at least approximately January 2009, Barclays often submitted inaccurate Dollar LIBORs that under-reported its perception of its borrowing costs and its assessment of where its Dollar LIBOR submission should have been. Certain members of management of Barclays, including senior managers in the treasury department and managers of the money markets desk, directed that the Barclays Dollar LIBOR submitters contribute rates that were nearer to the expected rates of other Contributor Panel banks rather than submitting the proper, higher LIBORs. Barclays Dollar LIBOR submitters, following the direction from certain members of management, submitted rates that they believed would be consistent with the submissions of other Dollar LIBOR Contributor Panel banks, or at least, that would not be too far above the expected rates of other members of the Contributor Panel. Consequently, on some occasions, Barclays submitted rates that were false because they were lower than Barclays otherwise would have submitted and contrary to the definition of LIBOR.

Barclays DOJ SOF ¶ 36 (emphasis added).

106. Barclays also admitted that its submitters understood that Barclays was submitting falsely suppressed USD-LIBOR rates during this period because

"Barclays was submitting its LIBOR contributions lower than the rate at which Barclays was borrowing or could have borrowed funds, and lower than the rate at which Barclays should have been submitting its LIBOR contributions." Barclays DOJ SOF ¶ 37.

a. In December 2007, a senior Barclays USD LIBOR submitter emailed his supervisor about submitting a one-month LIBOR lower than he would prefer if he were "given a free hand," and explicitly stated: "My worry is that we (both Barclays and the contributor bank panel) are being seen to be contributing patently false rates. We are therefore being **dishonest by definition** and are at risk of damaging our reputation in the market and with the regulators." CFTC Order at 22 (emphasis added). In another email, the senior Barclays USD LIBOR submitter wrote: "I will be contributing rates which are nowhere near the clearing rates for unsecured cash and therefore **will not be posting honest prices**." *Id.* at 24 (emphasis added). In May 2008, Barclays did not want to disclose to the FSA that its reported LIBOR rates understated its true borrowing costs for fear that reporting the "honest truth" would be a "can of worms." DOJ SOF ¶ 46.

b. As the CFTC found, "Barclays knew that accounting for its reputational risk in its determination of LIBOR submissions was not permissible under BBA's definition and criteria."[46] Barclays' LIBOR submitters and their supervisor nonetheless "understood that they were to follow this directive regardless of market conditions or whether their assessment of Barclays' cost of obtaining unsecured funds dictated their submissions to be otherwise."[47] In other words, "Barclays' U.S. Dollar LIBOR submitters knew that, by acting upon senior management's instruction . . . , they were making improper U.S. Dollar LIBOR submissions that were management's rates and not the rates that the submitters had

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[46] Barclays CFTC Order at 20.

[47] *Id.*

determined were the correct rates, *i.e.*, those that reflected Barclays' assessment of its cost of borrowing unsecured funds in the London interbank money market."[48] The CFTC further found that the senior Barclays Treasury managers "frequently discussed with the U.S. Dollar LIBOR submitters and their supervisor the specific rates to be submitted, in order to ensure they were in compliance with the directive."[49] The CFTC observed that those discussions "were memorialized in multiple recorded telephone calls and emails during the more than 18-month financial crisis period."[50]

107. Barclays also knew that the other panel banks, acting as a "pack," were submitting USD LIBOR rates that were too low. Barclays' employees revealed that "***all of the Contributor Panel banks***, including Barclays, were contributing rates that were too low." DOJ SOF ¶ 42 (emphasis added).

108. The FSA similarly concluded that "Barclays believed that the submissions of other contributing banks were inappropriate during the financial crisis." FSA ¶ 117.

a. A Barclays senior compliance officer stated in an internal e-mail to several levels of Barclays' senior management that he had informed the FSA "that Barclays believed that LIBOR submissions by the panel banks were distorted due to market illiquidity; that Barclays had been consistently the highest or one of the two highest submitters but was concerned to go higher given the negative media reporting about Barclays; that Barclays had concerns about the trillions of dollars of derivatives fixed off LIBOR; and that there were 'problematic actions' by some banks."[51] That senior compliance officer did not,

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[48] *Id.*

[49] *Id.*

[50] *Id.*

[51] Barclays CFTC Order at 22.

however, inform the FSA "that Barclays was making its LIBOR submissions based on considerations of negative market or press perceptions of Barclays or that its LIBOR submitters' assessments of the appropriate rates for submission were being altered to adhere to the directive to be below 'the parapet.'"[52]

b. On another occasion, following an April 16, 2008 Wall Street Journal article speculating "that panel member banks were making LIBOR submissions lower than what they were actually paying for funds to prevent the market from concluding that the banks were desperate for cash," a senior Barclays Treasury manager informed the BBA "that [Barclays] had not been reporting accurately," although he further noted "Barclays was not the worst offender of the panel bank members."[53]

109. The DOJ also concluded that "During approximately November 2007 through approximately October 2008, certain employees at Barclays sometimes raised concerns with individuals at the BBA, the [FSA], the Bank of England, and the Federal Reserve Bank of New York concerning the diminished liquidity available in the market and their views that the Dollar LIBOR fixes were too low and did not accurately reflect the market."[54] Those employees, the DOJ found, "attempted to find a solution that would allow Barclays to submit honest rates without standing out from other members of the Contributor Panel, and they expressed the view that Barclays could achieve that goal if other banks submitted honest rates."[55] The DOJ noted, however, Barclays' communications to regulators "were not intended and were not understood as disclosures through which

[52] *Id.*

[53] *Id.* at 23.

[54] Barclays DOJ SOF ¶42.

[55] *Id.*

Barclays self-reported misconduct to authorities."[56] Indeed, following those communications, "Barclays continued improperly to take concerns about negative publicity into account when making its submissions."[57] Moreover, the DOJ emphasized, "on other occasions, those employees did not provide full and accurate information during their conversations with these external parties."[58]

110. The CFTC similarly found that UBS's submissions were false:

> A bank's concerns about its reputation, negative market or press reports, or its trading positions and related profits are not legitimate or permissible factors upon which a bank may base its daily benchmark interest rate submissions. Benchmark interest rate submissions convey market information about the costs of borrowing unsecured funds in particular currencies and tenors, the liquidity conditions and stress in the money markets and a bank's, such as UBS's ability to borrow funds in the particular markets. By basing its submissions, in whole or in part, on UBS's trading positions and at times its reputational concerns, UBS knowingly conveyed false, misleading or knowingly inaccurate reports that its submitted rates for LIBOR, Euribor, and Euroyen TIBOR were based on and solely reflected the costs of borrowing unsecured funds in the relevant interbank markets and were truthful and reliable.

UBS CFTC 52.

111. UBS, like Barclays, also knew that all banks were artificially suppressing USD LIBOR as a "pack." UBS has admitted and acknowledged corporate responsibility for the fact that, "[a]t least some at UBS recognized that during this period, the 'pack' of Contributor Panel banks was not a reliable reference point for the bank's LIBOR submissions." DOJ UBS ¶ 101. As is reflected in a September 22, 2008 electronic chat between an ALM[59] employee and another UBS employee:

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56 *Id.*

57 *Id.*

58 *Id.*

59 ALM refers to the Asset and Liability Management group at UBS. According to the DOJ agreement, ALM "is the part of the Investment Bank Division which managed the bank's liquidity buffer and issuance of new commercial paper and certificates of deposit. Group Treasury provided guidance to ALM on funding issues. The head of ALM worked for the Investment Bank Division." DOJ UBS ¶ 17.

UBS Employee: why is the [Investment Bank] cash curve for USD so much higher than Libor? offered 35bps above libor currently

ALM employee: because the real cash market isn't trading anywhere near Libor . . . Libors currently are even more ficticious than usual

UBS Employee: isn't libor meant to represent the rate at which banks lend to each other?

ALM employee: that's the theory . . . in practise, it's a made up number . . . hence all the critisism it was getting a few months ago[[14]]

UBS Employee: why do banks undervalue it in times like this?

ALM employee: so as to not show where they really pay in case it creates headlines about that bank being desparate for cash . . . I suspect

UBS DOJ ¶101(DOJ citations omitted).

112. On May 21, 2008, a Wall Street Journal reporter asked UBS, by email, why, back in mid-April, UBS had been "paying 12 basis points for [commercial paper] more than it was posting as a Libor quote?" The senior manager heading ALM forwarded a proposed answer to the question to the Group Treasury senior manager in Stamford, stating: "the answer would be 'because ***the whole street was doing the same and because we did not want to be an outlier in the libor fixings, just like everybody else.***'" DOJ ¶ 117 (emphasis added).

113. UBS and Barclays were correct: all other Defendants were submitting USD LIBORs that were too low. And every Defendant knew this, just as UBS and Barclays did.[60]

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[60] While the DOJ's agreement with RBS does not discuss USD suppression, RBS's agreement with DOJ "encompasses RBS's submissions for the additional benchmark rates listed in Attachment C," which is held in confidence. RBS DOJ NPA ¶2. In addition, "In April 2010, RBS began an investigation into potential USD LIBOR-related misconduct in the form of potential USD suppression." The results of that investigation have not been published.

2. Defendant Member Banks Manipulated LIBOR Collectively in "Packs"

114. The empirical evidence shows that Defendants suppressed LIBOR jointly and collaboratively: they submitted LIBOR rates at similarly suppressed levels and yet diverged dramatically and in unpredictable ways from benchmark rates that tracked market fundamentals.

115. The Barclays and UBS investigations confirm that Defendants attempted to, and did, stay "within the pack" of LIBOR submissions – a pack that "stayed low." As Barclays admitted,

> Manager-1 explained that Contributor Panel banks are submitting rates that are too low because "banks are afraid to stick their heads above the parapet and post higher numbers because of what happened to [Barclays] when [Barclays] did. You get shot at." Manager-1 explained his/her view that Barclays was posting higher LIBORs than any other bank, and that other banks "are reluctant to post higher and because no one will get out of the pack, **the pack sort of stays low**."

Barclays DOJ ¶ 43 (November 29, 2007) (emphasis added).[61]

116. UBS issued standing instructions during various times during the Relevant Period to stay within the middle of the pack of USD LIBOR submissions. For example, "[o]n April 17, 2008, Submitter Advisor-2 – who was tasked with advising the U.S. Dollar submitter each day – sent an email to the U.S. Dollar LIBOR submitter informing him/her that 'the guidance I got from my management with regards to libors is that we should aim to be in the ***middle of the pack***.'" UBS DOJ ¶ 115 (emphasis added). "Immediately after this direction was issued on or about April 17, 2008, UBS's LIBOR submissions were in the middle of the submissions of the Contributor Panel banks for the next several days." *Id*. ¶ 116.

117. Later communications within UBS discussing the reasons behind the "middle of the pack" directive revealed that all panel banks were following similar

[61] In another discussion, the DOJ notes that Manager-1 "did not disclose Barclays's management directive to submit lower LIBORs in order to avoid negative media attention, which directive had resulted in improperly low LIBOR submissions." Barclays DOJ ¶ 44.

instructions to stay within the middle of the pack. As a UBS employee explained, "***the whole street was doing the same*** and we did not want to be an outlier in the libor fixings, just like everybody else." UBS DOJ ¶ 117 (emphasis added).

118. While UBS may have briefly attempted on June 2, 2008 to move its submissions "closer" to where it was actually obtaining loans in response to media pressure, UBS quickly reversed course and, during the week of June 16, 2008, "a Zurich-based UBS senior manager directed U.S. Dollar LIBOR submitters to lower their submissions over the next three days 'to ***get in line with the competition***' because, by contributing LIBOR submissions closer to CD and CP issuance levels, UBS was becoming an outlier relative to other Contributor Panel banks." UBS DOJ ¶120. Following this instruction, "on June 18, 2008, UBS's 3-month U.S. Dollar LIBOR submissions immediately dropped 5 basis points, to the 'middle of the pack' of the Contributor Panel banks." *Id.* ¶ 121.

119. As UBS admitted, "[f]rom that time, and for approximately the next 10 months, UBS's 3-month U.S. Dollar LIBOR submissions were ***identical*** to the published LIBOR fix, and largely consistent with the published LIBOR fix in the other tenors." UBS DOJ SOF ¶122 (emphasis added). This was the case even though "[d]uring this 10-month period, there were significant disruptions in the financial markets, affecting individual financial institutions in different ways." UBS DOJ SOF ¶ 123.

120. "Communications reflecting this 'middle of the pack' approach [at UBS] to formulating LIBOR submissions continued in late 2008 and early 2009." UBS DOJ SOF ¶124.

121. Barclays also admitted that, during this period, it followed instructions from its managers to stay "within the pack" of submissions from other panel banks:

> According to internal Barclays communications, for certain time periods, Barclays management instructed the Barclays Dollar LIBOR submitters not to be an "outlier" compared to other Contributor Panel

> banks, even if Barclays contributed the highest rate; Barclays could be "at the top of the pack" but not too far above the next highest contributor. In adopting that approach, certain managers believed that Barclays's submitted rates typically would be in the upper quartile of rates submitted by the Contributor Panel banks and thus excluded from the rates used in the calculation of the LIBOR fix. For certain other periods, however, management did not want Barclays to submit a rate higher than other Contributor Panel banks, and instructed the Dollar LIBOR submitters to stay "within the pack" of other members of the Dollar LIBOR Contributor Panel, and to submit rates "in line" with the other contributors. To the extent that those managers had any concerns about Barclays's submissions being used in the calculation of the LIBOR fix, those concerns apparently were outweighed by their priority for Barclays's submissions to be "***<u>within the pack</u>***."

Barclays DOJ SOF ¶37 (emphasis added).

122. On April 27, 2008, a Barclays manager conceded, ***<u>"to the extent that, um, the LIBORs have been understated, are we guilty of being part of the pack? You could say we are.</u>***" FSA ¶ 131. As one Barclays submitter put it, "just set it where everyone else sets it, we do not want to be standing out." Barclays FSA Final Notice ¶ 123.

123. In late October 2008, for example, "a member of senior management conveyed an instruction to the LIBOR submitters, through their supervisor, that Barclays' U.S. Dollar and Sterling LIBOR submissions needed to be lowered to be within the pack." Barclays CFTC 24. "In emails and other communications, Barclays' submitters continued to indicate into at least mid-2009 that they were still basing their submissions at levels to minimize market or press speculation about Barclays." Barclays CFTC 25.

124. On November 27, 2007, a Barclays manager expressed the view, just as UBS had, that other banks also wanted to stay within the pack: "other banks 'are reluctant to post higher and because no one will get out of the pack, the pack sort of stays low.'" Barclays DOJ ¶ 43.

125. Barclays instructed its employees to follow the directive to stay within the pack on a day-to-day basis. On November 30, 2007, for example, a "senior Barclays Treasury manager" spoke with Barclays' "senior U.S. Dollar

LIBOR submitter," who was "seeking guidance on his submissions."[62] During that conversation, the senior Treasury manager "related his understanding that senior management had discussed the issue and directed them to continue to 'stick within the bounds[,] so no head above [the] parapet.'"[63] The Treasury manager also told the LIBOR submitter "that they would have to deal with the settings, meaning how to make LIBOR submissions per this directive, on 'a day-to-day-basis.'"

126. Even the BBA acknowledged that, at least by April 2008, it knew that no panel banks were "clean-clean" and that it understood what would happen to any bank that "moved against the trend of lower submissions."

> At this time, a senior Barclays Treasury manager informed BBA in a telephone call that it had not been reporting accurately, although he noted that Barclays was not the worst offender of the panel bank members. "We're clean, but we're dirty-clean, rather than clean-clean." ***The BBA representative responded, "no one's clean-clean."*** The senior Barclays Treasury manager replied "no, because of the very fact of what happened to us… We were clean .. the market … reacted accordingly. And that's why we stepped away again." The senior Barclays Treasury manager was referencing the market speculation about Barclays' high LIBOR submission in early fall 2007. ***The BBA representative indicated that he understood what happened to any bank that moved against the trend of lower submissions...***
>
> Barclays did not explain in these calls that it was making its LIBOR submissions pursuant to a management directive and not in accordance with BBA's definition and criteria or consistent with the costs of obtaining unsecured funds in the London interbank money market.

Barclays CFTC p. 23 (emphasis added).

3. Defendants' LIBOR Manipulation Succeeded as a "Pack" by Sharing Confidential LIBORs

127. Direct evidence shows that Defendants' conspiracy to suppress LIBOR as a pack was facilitated by sharing LIBOR bids with each other ***before they were submitted***, in contravention of the second LIBOR panel rule that required the submissions to remain confidential.

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62 Barclays CFTC Order at 21.

63 *Id.*

128. For example, a November 29, 2007 email shows that Barclays knew, in advance of the submission deadline, the proposed confidential submissions of ***every USD LIBOR panel bank***.

> On 29 November 2007, all the contributing banks' submissions for one month US dollar LIBOR increased by a range of 35 to 48 basis points. Barclays' submission increased from 4.86 on 28 November to 5.3 on 29 November (an increase of 44 basis points). The offer that Barclays saw in the market was 30 basis points higher, at 5.60. Barclays' Submitter had intended to submit a rate of 5.50 on that day. However he was overruled on a conference call during which the submissions were discussed, as a rate of 5.50 was expected to draw negative media attention (***as this would have been 20 basis points above the next highest submission***). Manager E said on the call that "***it's going to cause a shit storm***". Barclays therefore submitted a rate of 5.30, which was in line with another contributing bank's submission that day.

Barclays FSA ¶118 (emphasis added).

129. Barclays could not have known in advance that its proposed submission would be "20 basis points above the ***next highest submission***" unless it knew the proposed submissions of ***every other panel bank before those rates were published***. A review of the publicly available 1M LIBOR submissions confirms what is implied by FSA ¶ 118: Barclays had advance knowledge that the "next highest submission" of the other 15 panel banks was going to be 5.30, which is exactly 20 basis points below the 5.50 that Barclays ***had intended to submit that day***. Barclays used its advance knowledge of every bank's confidential submissions to alter its submission to further suppress LIBOR to stay within the pack.

130. The high volatility in LIBOR submissions between November 28 and November 29, 2007 also shows why it would have been impossible for Barclays – or any other panel bank – to stay within the pack without colluding to share confidential LIBOR submissions. The banks could not have predicted the submissions of other panel banks on November 29, 2007 based solely on the previous day's public submissions because submissions moved on average approximately 40 basis points from the previous day. Nor could they have

predicted the submissions of other panel banks on November 29, 2007 based on publicly available information about market fundamentals. The Eurodollar benchmark, which captured changes in market fundamentals, moved much more dramatically between November 28 and November 29 than LIBOR did: the Eurodollar benchmark moved 70 basis points that day (from 4.9 to 5.6), whereas LIBOR only moved 40 basis points (from 4.82 to 5.22). Rather than basing their November 29, 2007 submissions on the LIBOR definition, or on predictions of what other banks would do, the only plausible inference is that every panel bank colluded to share pricing information in order to stay low as a pack.

131. Nor was this an isolated event: Barclays' managers issued standing instructions for certain periods not to be too far above the "next highest contributor" (Barclays DOJ SOF ¶ 37) – something that could not be achieved unless Barclays expected that it would continue to have access to the advance, confidential submissions of every other panel bank on an ongoing basis. And the instructions were very precise. According to the CFTC's review of the evidence it collected, "Senior Barclays Treasury managers provided the [LIBOR] submitters with the general guidance that Barclays's submitted rates should be ***within ten basis points*** of the submissions by the other U.S. Dollar panel banks . . . ." Barclays CFTC 20 (emphasis added). Similarly, on April 26, 2008, a senior Barclays treasury manager asked USD submitters to "not sort of be ***ten basis points above the next***" highest submitter. Barclays CFTC p. 23.[64] Submitters could not be expected to stay within 10 basis points of the next highest submitter unless the senior treasury manager expected that Barclays would continue to have access to every Defendant's confidential LIBOR submissions in advance. The Barclays Settlements indicate other instances when Barclays had advance knowledge of

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[64] Upon hearing this, the submitter told his supervisor that "he thought there was a compliance issue, [but] no internal action was taken to address his concerns." Barclays CFTC p. 23.

other banks' supposedly secret LIBOR quotes, either directly, through communication with brokers, or both. *e.g.*, FSA Final Notice ¶ 117 ("[B]rokers tell me that [another panel bank] is going to set at 5.15 for both (up 8.5 and 10 from yesterday)" (quoting Barclays email)); Transcript of Telephone Conference between Barclays and Federal Reserve Bank of New York, Oct. 24, 2008 ("[T]hree-month libor is going to come in at 3.53. . . . it's a touch lower than yesterday's but please don't believe it. It's absolute rubbish.").

132. A plausible inference is that Defendants shared confidential LIBOR submissions in advance in order to enable them to collude to suppress LIBOR. That is what Barclays did with the information on November 29, 2007. Plaintiff anticipates that discovery will reveal substantial additional evidence of the advance sharing of LIBOR submissions in service of the conspiracy.

133. Based on the specific information provided by regulators in the UBS settlements regarding the nature and timing of management's directives, an expert was able to test the likelihood that UBS submitters could have complied with management directives to stay within the pack absent collusion with the other Defendants.

134. The expert looked specifically at the period beginning on or about June 18, 2008 and continuing until mid-April 2009. The expert first looked at how often UBS's daily 3-month LIBOR submissions were "in the middle of the pack" during this six month period.

135. The expert then undertook a probability analysis to determine how likely it was the UBS LIBOR submitters could have been able to successfully target their submissions "in the middle of the pack" as often as they did absent collusion. To do this, the expert looked at relevant public information available to the LIBOR submitters at the time they made their submissions at around 11:00 a.m. London time. The expert determined the relevant public information reasonably available to UBS LIBOR submitters to be: (i) prior day 3-month

LIBOR submissions from the Panel Banks; and (ii) changes in the Federal Reserve Eurodollar Deposit (FRED) Rate, which would have reflected changes in relevant Market Fundamental from the prior day, and (iii) changes in the opening and closing prices of Eurodollar futures prices from one day prior and from two days prior. *See*, *e.g.*, ¶¶ 176–177.

136. The expert determined that during the period of June 18, 2008 through April 14, 2009, UBS's LIBOR submitters were highly successful in meeting management's directive. Specifically, over this ten month period, UBS's 3-month LIBOR submissions were at or within the interquartile range (the two middle fourths of Panel Bank submissions that were averaged to calculate each day's LIBOR rates) 99.0% of the time, and were within the interquartile range (*i.e.*, not tied with the 4th lowest or 13th highest submission) 86.7% of the time. Further demonstrating UBS submitters' stunning ability to consistently target the actual published LIBOR rates despite a volatile market, the DOJ found that from June 18, 2008, and continuing for approximately the same 10 month period, UBS's 3-month LIBOR submissions were identical to the published LIBOR fix, and largely consistent with the published LIBOR fix in the other tenors.

137. Using probability analysis, the expert then calculated the likelihood to be ***less than 1%*** that UBS could have achieved this remarkable consistency based on consideration of the prior day's interquartile range LIBOR Panel Bank submissions. The expert further determined that there was also a less than 1% likelihood that UBS could have achieved its consistent record during this period based on consideration of the prior day's interquartile range LIBOR Panel Bank submissions and changes in the FRED Rate. The expert also determined that there was also a ***less than 1%*** likelihood that UBS could have achieved its consistent record during this period based on consideration of the prior day's interquartile range LIBOR Panel Bank submissions and changes in the Eurodollar opening or closing prices from either one day prior or from two days prior.

138. The duration of, and the degree of successful compliance with management's specific LIBOR submission directives relative to where other Panel Banks' suppressed submissions fell on a daily basis further strongly support that the LIBOR suppression was accomplished through the collusive cooperation and agreement among the Panel Banks.

F. Defendants Conspired to Manipulate LIBOR To Benefit Individual Trading Positions

139. As noted above, at least some Defendants were motivated to participate in the conspiracy to suppress USD LIBOR partly in order to benefit their net trading positions. In addition, Defendants conspired to manipulate LIBOR currencies between at least January 2007 and June 2010 to benefit their daily trading positions, including by colluding to manipulate USD and Yen LIBOR.

140. Even small shifts in LIBOR settings can have a huge impact on the profitability of Defendants' LIBOR-based instruments. For example, in October 2008, a UBS manager advised that "UBS had trading positions that would cause losses of ***USD 4m per basis point*** if 'libors move higher.'" UBS FSA ¶ 103. Similarly, RBS admitted that "Because of the high value of the notional amounts underlying derivatives transactions tied to Yen and Swiss Franc LIBOR, even very small movements in those rates could have a significant positive impact on the profitability of traders' trading portfolios, and a correspondingly negative impact on their counterparties' trading positions." RBS DOJ SOF ¶78.

141. Collusion to suppress LIBOR and collusion to manipulate LIBOR to benefit individual trading positions were motivated by precisely the same improper purpose: illegitimately protecting the banks' profitability using the banks' control of LIBOR.

1. <u>RBS' Role in LIBOR Manipulation</u>

142. In a deferred prosecution agreement filed on February 6, 2013, RBS acknowledged and agreed that the DOJ will file a two-count criminal Information in the United States, alleging "one count of ***<u>price-fixing</u>***, in violation of the Sherman Act, Title 15, United States Code, Section 1." DOJ DPA (emphasis added). As part of that agreement, RBS "admits, accepts, and acknowledges that it is responsible under United States law for the acts of its officers, directors, employees, and agents as charged in the Information, and as set forth in the Statement of Facts." DOJ DPA ¶2.

143. RBS agreed that by colluding to manipulate Yen LIBOR, RBS colluded to fix the price of LIBOR-based instruments because Yen LIBOR is a component of price of LIBOR-based instruments:

> Traders, former traders, and/or submitters at competing financial institutions, including RBS, agreed to coordinate and in fact coordinated with regard to Yen LIBOR submissions, causing the manipulation of the LIBOR reference rate on certain occasions. Because Yen LIBOR was a pricing component of derivatives contracts held by the financial institutions, the traders benefited from this agreement by affecting the profitability of the contracts on particular settlement dates.

RBS DOJ ¶ 82.

144. On <u>April 12, 2013</u>, the DOJ charged RBS with one count of "price-fixing" in violation of Section 1 of the Sherman Act. RBS admitted that it was responsible for the following acts, as charged in the Information:

> From at least as early as 2007 through at least 2010, Defendant THE ROYAL BANK OF SCOTLAND PLC, through its employees, and its co-conspirators, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce. The aforesaid combination and conspiracy consisted of an agreement, understanding and concert of action among the Defendant and its co-conspirators, the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen LIBOR, a key price component of the price thereof, on certain occasions.

In violation of Title 15, United States Code, Section 1.

145. RBS also agreed that its Yen LIBOR price-fixing conspiracy lasted from at least as early as February 2007 through 2010:

> From at least as early as February 2007 through 2010, RBS regularly colluded with UBS to request that their respective Yen LIBOR submitters contribute Yen LIBOR submissions to benefit their trading positions. ¶ 43- 65.

RBS DOJ SOF ¶43.

Similarly, the FSA found that:

> Between February 2007 and June 2010, RBS, through two of its Derivatives traders, colluded with Panel Banks and Broker Firms in relation to JPY and CHF LIBOR submissions.

RBS FSA ¶ 9.

146. Documents published in the RBS orders and reports issued by various agencies confirm that RBS colluded, or expected that it would be able to collude, with every Yen panel bank:

a. Emails show that RBS colluded with at least 5 different Yen Panel Banks in fixing Yen LIBOR. RBS FSA ¶¶ 59-60, 65-67. For example, on June 6, 2009, a RBS trader (identified as Derivatives Trader B) enlisted a Broker to collude with at least 4 different panel banks to lower LIBORs in several tenors:

Broker A: *Alright okay, alright, no we've okay just confirming it. We've, so far we've spoke to* [Panel Bank 3]. *We've spoke to a couple of people so we'll see where they come in alright. We've spoke, basically… basically we spoke to* [Panel Bank 3], [Panel Bank 4], [Panel Bank 5], *who else did I speak to?* [Panel Bank 6]. *There's a couple of other people that the boys have a spoke to but as a team we've basically said we want a bit lower so we'll see where they come in alright?*

Derivatives Trader B: *Cheers.*

b. As the FSA concluded, RBS engaged in "at least 30 wash trades in order to facilitate corrupt brokerage payments to Broker Firms," in many instances in exchange "for efforts to influence Panel Banks' JPY LIBOR submissions." FSA ¶¶ 63, 65.

c. RBS also colluded with a sixth bank -- a Swiss Panel Bank - to fix CHF (Swiss Franc) LIBOR.

147. Documents also confirm that, according to RBS, price-fixing of LIBORs was the norm, not the exception, during the financial crisis. For instance, a RBS Submitter "observed to a Broker during the financial crisis that, in the absence of liquidity, 'people are just setting LIBORs to suit their books' and 'it's just where you've got your fixings really….'" RBS FSA ¶71.

148. RBS manipulated USD LIBOR and other LIBOR currencies for its own profit. For example, the FSA found, after reviewing the documents, that RBS "Primary Submitters took into account the impact of LIBOR or RBS's LIBOR submissions on the profitability of transactions in their money market trading books as a factor when making (or directing others to make) RBS's JPY, CHF and USD LIBOR submissions." FSA ¶ 105.

149. "In total, the misconduct involved at least 21 individuals at RBS, at least one of whom was a Manager." FSA ¶ 109.

2. <u>UBS and Thomas Hayes' Role in LIBOR Manipulation</u>

150. RBS admitted to the Antitrust Division of the Department of Justice that it colluded regularly with UBS to manipulate Yen LIBOR from at least as early as February 2007 through 2010.

According to a <u>June 19, 2013</u> report in the Wall Street Journal, on <u>June 18, 2013</u>, the U.K.'s Serious Fraud Office ("U.K. SFO") filed fraud charges against a former trader at UBS and Citigroup who was allegedly at the center of efforts by some of the world's largest financial institutions to manipulate LIBOR. British prosecutors charged Thomas A.W. Hayes with eight counts of "conspiracy to defraud" in an alleged attempt to manipulate LIBOR. Mr. Hayes, a 33-year old British citizen, has long been a primary target of the world-wide investigation based on evidence uncovered by officials in the U.K. and U.S. that Hayes' efforts to inflate or suppress LIBOR was widespread, occurring on nearly a daily basis over several

years. According to a June 21, 2013 Wall Street Journal article, Mr. Hayes was a derivatives trader in Tokyo from 2006 through 2010, the period during which prosecutors allege he attempted to manipulate LIBOR. He was referred to by colleagues as the "Rain Man" for his sharp intellect and socially awkward demeanor, but was also regarded as one of the top traders while working for UBS in Tokyo. In fact, he was lured away by Citigroup with a $5 million job offer. In 2010, Citigroup suspended Mr. Hayes on suspicion of approaching a London trading desk about manipulating LIBOR.

151. According to a June 21, 2013 Wall Street Journal article, each of the eight charges accuse Mr. Hayes of "dishonestly seeking to manipulate [LIBOR]... with the intention that the economic interests of others would be prejudiced and/or to make personal gain for themselves or another." In addition, the British charges accuse Mr. Hayes of allegedly conspiring with employees at eight banks and interdealer brokerage firms, as well as with colleagues at UBS and Citigroup. The banks include New York based J.P. Morgan Chase & Co.; Germany's Deutsche Bank AG; British banks HSBC Holdings PLC and Royal Bank of Scotland Group PLC; and Dutch lender Rabobank Groep NV. Prosecutors also allege that Mr. Hayes also worked with employees of ICAP PLC, Tullett Prebon PLC and R.P. Martin Holdings Ltd. Two R.P. Martin employees were arrested along with Mr. Hayes in December 2012, but no charges were brought at the time. Since then, R.P. Martin suspended both its chief executive and executive director. In fact, on the same day that British prosecutors announced filing charges against Mr. Hayes, the Hong Kong Monetary Authority announced that its investigation into possible manipulation of the Hong Kong interbank offered rate has expanded to include HSBC Holdings PLC among other banks. The probe, which the agency launched in 2012, originally focused solely on UBS.

152. Before the U.K. SFO filed recent criminal charges against Mr. Hayes, in December 2012, prosecutors with the U.S. DOJ charged Mr. Hayes and a

former colleague with conspiracy to commit fraud by attempting to manipulate LIBOR. The New York Times reported on June 19, 2013 that the former UBS colleague charged with Mr. Hayes is Roger Darin, 41, of Switzerland. Since Mr. Hayes was not in the United States and has not been extradited, a successful prosecution by the U.K. likely would mean that Mr. Hayes will not face U.S. charges because British double-jeopardy laws preclude anyone charged in the U.K. from being extradited to face similar charges elsewhere. According to the U.S. DOJ, while at UBS Mr. Hayes openly discussed his plans during morning meetings and his personal Facebook page sometimes included messages about where he wanted LIBOR to move. Mr. Hayes' activities were known to his superiors. Indeed, when U.K. and U.S. authorities believe that settled with UBS in 2012, they released documents that indicated that Mr. Hayes' superiors were aware of his alleged tactics. Mr. Hayes has not commented on his alleged role in the LIBOR manipulation, except that in a January 2013 text message he sent to the Wall Street Journal he offered, "this goes much much higher than me."

153. In December 2012, U.S. prosecutors charged Mr. Hayes and a former colleague with conspiracy to commit fraud by attempting to manipulate LIBOR. But since he was not in the United States and has not been extradited, a successful prosecution by the U.K. likely would mean that Mr. Hayes will not face U.S. charges. British double-jeopardy laws preclude anyone charged in the U.K. from being extradited to face similar charges elsewhere. Thomas Hayes, who worked at UBS from the spring of 2006 through December 2009, was criminally charged with violating the Sherman Act by conspiring to fix Yen LIBOR, which is a component of price of LIBOR-based instruments:

> In or about May 2009, in the Southern District of New York and elsewhere, TOM ALEXANDER WILLIAM HAYES, the defendant, and his co-conspirators, including an employee at a major financial institution, and others known and unknown, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign trade and commerce in violation of Section 1 of the Sherman Act. The aforesaid combination and conspiracy consisted of an

> agreement, understanding, and concert of action among HAYES and his co-conspirators, the substantial terms of which were to fix Yen LIBOR, a key price component of Yen LIBOR-based derivative products.

154. Documents show that, while Mr. Hayes was at UBS, UBS colluded with other Yen panel banks to manipulate Yen LIBOR with great frequency and for enormous profit from at least as early as January 2007 through at least September 2009. According to CFTC's review of the documents:

> The [UBS] Senior Yen Trader conducted his extensive, systematic course of unlawful conduct to manipulate Yen LIBOR and periodically, Euroyen TIBOR, from shortly after he joined UBS in early July 2006 until his departure in the fall of 2009, following a dispute with UBS over his compensation.

CFTC 11.

> As with his internal requests, the Senior Yen Trader began coordinating regularly with derivatives traders at other panel banks by January 2007. The Senior Yen Trader coordinated with traders primarily at four panel banks whom he knew or had worked with previously.

CFTC 17

155. The CFTC gave the following summary of a small sampling of the numerous communications between Mr. Hayes and other Yen Panel banks.

> As with his internal requests, the Senior Yen Trader began coordinating regularly with derivatives traders at other panel banks by January 2007. The Senior Yen Trader coordinated with traders primarily at four panel banks whom he knew or had worked with previously. The Senior Yen Trader, or others acting on his behalf, made about 100 requests of traders at the other panel banks.
>
> The Senior Yen Trader generally made requests of the other banks' traders, who regularly agreed to pass his requests to their Yen LIBOR or, on occasion, Euroyen TIBOR submitters. The Senior Yen Trader also made requests directly of the submitter of at least one bank. The other traders often conveyed success with comments such as, "done" and "we normally do well for u!!!"
>
> For their own manipulative purposes of benefiting their derivatives trading positions, certain of the derivatives traders at the other banks sought reciprocating assistance from the Senior Yen Trader to make requests on their behalf to UBS's submitters. The Senior Yen Trader readily agreed to help the other traders. In fact, he often encouraged them to ask for help as a way to curry favor and ensure his requests were accommodated.

> The following small sampling of the numerous communications between the Senior Yen Trader and derivatives traders at the other panel banks reveal:
>
> - descriptions of the Senior Yen trader's strategy and his success in keeping rates "artificially high;
> - how, as with the internal requests, the Senior Yen Trader pressed traders at the other banks for assistance particularly on key fixing dates around the IMM dates or the turn of the calendar year;
> - how routine the requests were and how the traders believed that LIBOR was vulnerable to manipulation at their whim and for their benefit;
> - that the requests covered a number of days of LIBOR submissions at times, such that one request could result in multiple days of false LIBOR submissions potentially affecting the fixing for the same period;
> - the pressure the Senior Yen Trader felt to keep making money for UBS; and
> - that the traders believed that they succeeded at times.

CFTC 17-18.

156. Within the collection of documents reviewed by the FSA, Mr. Hayes was involved in a high number of written requests evidencing collusion with other panel banks:

> The Senior Yen Trader and others at UBS made approximately 2,000 written requests of UBS's Trader-Submitters, traders at other panel banks and interdealer brokers to try to achieve their manipulative goals. The written requests of the Senior Yen Trader and others occurred on approximately 570 trading/reporting days, mostly between late 2006 and late 2009, which is approximately 75% of the time.

157. UBS, through Mr. Hayes, colluded with other Yen LIBOR panel banks to suppress Yen LIBOR to benefit Mr. Hayes's trading positions. Mr. Hayes colluded either directly with other Yen LIBOR panel banks or through intermediaries such as interdealer brokers. For example:

a. On <u>February 25, 2009</u>, Mr. Hayes asked an employee at an interdealer broker, "Broker B"[65] for "low 1m and 3m," saying "we must keep 3m

[65] The Hayes-Darin Complaint identifies "Broker B" as "a broker employed at Brokerage Firm B, "a London-based, inter-dealer broker that, in exchange for commissions or other fees, matched buyers and sellers in various financial products, enabling them to engage in transactions." Hayes-Darin Cmplt. at 5.

down" and "try for low on all of em." The broker responded: "ok ill do my best for those tday."[66]

b. On March 6, 2007, an employee at a bank identified in the Hayes-Darin Complaint as "a global financial services company headquartered in Edinburgh, Scotland" ("Trader C") requested that Mr. Hayes take steps to ensure low UBS Yen LIBOR submissions for all maturities: "can u go fr low everything plse?" Mr. Hayes responded that he would make the request but he personally needed a high 3-month Yen LIBOR fixing. Mr. Hayes then made a request to a UBS LIBOR submitter for low 1-month and 6-month Yen LIBOR submissions "hi pls don't forget low 1m and 6m!" The Hayes-Darin complaint notes that "[t]hat day, compared to the previous day, UBS's 1-month and 6-month Yen LIBOR submissions dropped by 2.0 and 2.5 basis points, respectively, consistent with Trader C's request to Hayes." Hayes-Darin Cmplt. at 22.

c. Between about April 19 and April 24, 2007, Mr. Hayes requested low Yen LIBOR submissions from Trader C.

i. On April 19, 2007, Mr. Hayes asked Trader C "can you do me a favour and ask your cash guys for a low 3m" because Mr. Hayes had "some huge huge fixes." Trader C responded "will do my best I am pretty flat at the moment" "so don't really care."[67] The Hayes-Darin Complaint notes: "That same day, Bank C's 3-month Yen LIBOR submission was 0.65 percent, down from 0.67 percent the previous day." Hayes-Darin Cmplt at 22–23.

ii. The next day, Mr. Hayes thanked Trader C: "hi mate thanks for keeping 3m low y/day wd really appreciate it if u cld try for the same over the next few days . . . ."[68] Later that day, Mr. Hayes asked Trader C again: "I

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[66] Hayes-Darin Cmplt., Exh. 9.

[67] Hayes-Darin Cmplt., Exh. 15.

[68] Hayes-Darin Cmplt., Exh.15.

know I only talk to you when I need something but if you could ask your guys to keep 3m low wd be massive help as long as it doesn't interfere with your stuff."[69] Mr. Hayes followed up later, asking Trader C "mate did you manage to spk to your cash boys?" Trader C responded "yes u owe me they are going 68 and 71" Mr. Hayes responded "thx mate yes I do . . . in fact I owe you big time." Then later, after learning that Bank C had made a 3-month Yen LIBOR submission of 0.64 percent that day. Mr. Hayes exclaimed: "mater they set 64! . . . that's beyond the call of duty!"[70]

iii. On April 24, 2007, Mr. Hayes wrote "Trader C": "hello mate thanks for the help on libors, if you cld ask for a low 3m for one last day wd be big help"[71]

iv. The Hayes-Darin Complaint notes: "After three consecutive trading days at 0.64 percent, Bank C's 3-month Yen LIBOR submission increased to 0.65 percent the following day, on or about Wednesday, April 25, 2007." Hayes-Darin Cmplt. at 23.

158. Further, after Mr. Hayes left UBS and started working with "Bank D," which the Hayes-Darin Complaint identifies as "a global financial services company headquartered in New York, New York" (Hayes-Darin Cmplt. at 5)[72], Mr. Hayes continued to collude to manipulate Yen LIBOR to benefit his trading positions, for example:

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69 Hayes-Darin Cmplt., Exh. 15

70 Hayes-Darin Cmplt., Exh. 15.

71 Hayes-Darin Cmplt, Exh. 15.

72 The Hayes-Darin Complaint notes that "From in or about December 2009 through in or about September 2010, after leaving UBS, HAYES was employed as a senior Yen swaps trader at Bank D in Tokyo." Hayes-Darin Cmplt. at 6. The Wall Street Journal identified Defendant Citigroup as Mr. Hayes' employer immediately after Defendant UBS. David Enrich, "Rate-Rig Spotlight Falls on 'Rain Man'," Wall Street Journal, Feb. 8, 2013.

a. On May 12, 2010, Mr. Hayes told a rate submitter at UBS: "libors are going down tonight" "because I am going to put some pressure on people."[73]

b. Between March 3 and 4, 2010, Mr. Hayes attempted to influence Bank C's Yen LIBOR submissions.

i. Mr. Hayes told a broker on March 3, 2010, "I really need a low 3m jpy libor into the imm [the International Monetary Market date, which occurs quarterly on the third Wednesday of March, June, September, and December]," and "any favours you can get with the due at [Bank C] would be much appreciated" "even if he on;ly move 3m down 1bp." The broker said "i'll give him a nudge later, see what he can do" and then asked the Bank C submitter: "u see 3m jpy libor going anywhere btween now and imm?" noting "we have a mutual friend who'd love to see it go down, no chance at all?" The Bank C submitter said "haha TH by chance," and the broker responded "shhh."[74]

ii. The Hayes-Darin Complaint notes that, the next day, Bank C's 3-month Yen LIBOR submission decreased by one basis point compared to the previous day. Hayes-Darin Cmplt. at 26. After the LIBOR submissions were posted, the Bank C LIBOR submitter reported back to the broker: "Libor lower ;)," and the broker responded "good work!!!!"[75]

159. The UBS Japanese unit where Mr. Hayes worked pled guilty to U.S. fraud charges relating to manipulation of Yen LIBOR.

160. Mr. Hayes enlisted the help of brokers to collude, or attempt to collude, with a large number of panel banks –on one occasion, a plausible inference is that Mr. Hayes asked a broker to contact every Yen panel bank to

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[73] Hayes-Darin Cmplt. Exh. 17.

[74] Hayes-Darin Cmplt., Exh. 18.

[75] Hayes-Darin Cmplt., Exh. 18.

attempt to collude with them. Reaching out to brokers to influence other banks' submissions was a common practice at UBS:

> During the Relevant Period [i.e., January 1, 2005 through December 31, 2010], the UBS Traders (one of whom was a Manager) were directly involved in making more than 1000 documented requests to 11 Brokers at six Broker Firms" to "attempt to influence the JPY LIBOR submissions of other banks."

FSA ¶ 13.

161. Mr. Hayes, in particular, would often speak to brokers to enlist their help in colluding with other Yen panel banks. On March 31, 2009, for example, UBS admitted that Trader-1 (identified in the press as Mr. Hayes)[76] "asked Broker C to help influence 9 of the 16 banks by convincing them to lower their LIBOR submissions from the previous day, thus lowering the resulting 1-month and 3-month Yen LIBOR fix."

Trader-1:	mate we have to get 1m and 3m down . . . 1m barely fell yesterday . . . real important
Broker-C:	yeah ok
Trader-1:	banks to have a go w in 1m are
Trader-1:	[Bank-F]
Trader-1:	[Bank-G]
Trader-1:	[Bank-H]
Trader-1:	[Bank-E]
Trader-1:	[Bank-I]
Trader-1:	[Bank-C]
Trader-1:	[Bank-A]
Trader-1:	[Bank-J]
Trader-1:	and [Bank-K]
Trader-1:	pls
Broker-C:	got it mate

162. After September 2009, "UBS Yen Trader 2 also reached out for help to Derivatives Broker B1, who similarly reassured him that ***he regularly spoke to***

[76] The CFTC recounts this same conversation, and refers to Trader-1 as "Senior Yen Trader." CFTC 25-26. A press report identifies the Senior Yen Trader as Mr. Hayes. See http://online.wsj.com/article/SB10001424127887324459045782858107061074 42.html

at least seven other panel bank submitters and he would try to help Yen Trader 2, if he needed the help." UBS CFTC 37 (emphasis added).

163. The breadth and scope of the conspiracy is illustrated by what the CFTC and Mr. Hayes referred to as the "Turn Campaign."

> The Turn Campaign commenced in early June 2009. The Senior Yen Trader's derivatives positions tied to six-month Yen LIBOR were due to reset or mature on June 29, 2009 and would benefit from a high six-month Yen LIBOR. A single basis point move in Yen LIBOR was worth approximately $2 million to him. The Senior Yen Trader coordinated with the UBS Yen Trader-Submitter I, the primary four brokers he used, and his friend, the Trader-Submitter at Yen Bank F, to try to keep six-month Yen LIBOR high.

CFTC 29.

164. To ensure that submissions moved in the right direction on June 29, 2009, Mr. Hayes persuaded a broker to approach ***every panel bank*** to seek their help in raising Yen LIBOR that day:

> In an electronic chat on 29 June 2009, Trader A informed Broker A of the rates that UBS and Panel Bank 2 would submit for six month JPY LIBOR. ***Trader A instructed Broker A what six month JPY LIBOR submissions he wanted from every Panel Bank***, going through them one by one. Trader A told Broker A ".. . do your best and i'll sort u out". ***Trader A stressed to Broker A that it was crucial that he approached the Panel Banks***, saying "v v v important pls try extra extra hard mate". Broker A confirmed he would try hard to assist.

UBS FSA ¶ 80.b.

165. While spoof bids were sometimes contemplated,[77] Mr. Hayes expected the broker to try to persuade every bank to collude to submit higher LIBOR that day. Mr Hayes asked the broker to "***contact each panel bank***" and "***make sure [the banks] all know it's the turn*** [i.e., the day when Mr. Hayes could

[77] The CFTC gives the following description of spoofing the market: "The Senior Yen Trader also asked certain brokers to post false bids and offers for cash trades to further disseminate false pricing information to the market and other Yen panel banks and thereby benefit his positions. This is sometimes known as 'spoofing the market.'" CFTC 26.

make a lot of money from a move in LIBOR submissions].” UBS CFTC 32.[78] This shows that Mr. Hayes reasonably expected that he could earn and had earned the collusive cooperation from each and every panel bank. Although the Yen LIBOR fixing had been dropping slowly over the month of June 2009, 7 panel banks reversed course on June 29, 2009 and placed higher submissions that were consistent with Mr. Hayes’ requests.

166. In 2009, Citibank wooed Mr. Hayes from UBS. According to a press report, “[w]hen Citigroup in 2009 sought to lure [Mr. Hayes] away from UBS with a $5 million job offer, some at UBS fought to keep Mr. Hayes by telling UBS executives of his ability to tap contacts who could nudge Libor up or down.”[79] According to the same press report, “After Citigroup offered Mr. Hayes more than double the nearly $2 million he was earning at UBS, his UBS boss, Michael Pieri, lobbied a senior UBS executive to counter with a big bonus, according to people familiar with the offer. Emails released by the Justice Department show Mr. Hayes's boss cited the trader’s ‘strong connections with Libor setters in London. This information is invaluable for the derivatives books.’”

167. After an investigation into Mr. Hayes’ conduct, which involved several banks, he was eventually terminated. In a text message to the press, Mr. Hayes said that “this goes much much higher than me.” His close friend told the press that “[t]rying to rig Libor ‘was common industry practice.’”

168. In December 2012, UBS Securities Japan Co., Ltd. (“UBSSJ”), the entity where Mr. Hayes worked, agreed to plead guilty to one count of wire fraud (18 U.S.C. § 1343) for secretly manipulating Yen LIBOR and TIBOR. UBSSJ

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[78] The broker with whom Mr. Hayes was speaking agreed that he need to remind the other banks, saying: “yeah thats needed bevcasuse sometimes poepel forget and set them the same ...”

[79] http://online.wsj.com/article/SB10001424127887324445904578285810706107442.html

admitted in its plea that false and misleading LIBOR submissions were "material" from the perspective of counterparties to financial transactions.

3. Barclays' Role in LIBOR Manipulation

169. Barclays admitted that it colluded to manipulate LIBOR submissions dating back to August 2005:

> From at least approximately August 2005 through at least approximately May 2008, certain Barclays swaps traders communicated with swaps traders at other Contributor Panel banks and other financial institutions about requesting LIBOR and EURIBOR contributions that would be favorable to the trading positions of the Barclays swaps traders and/or their counterparts at other financial institutions.

DOJ SOF ¶ 23

170. The FSA found direct evidence that Barclays attempted to collude on USD LIBOR and Euribor submissions between at least February 2006 and October 2007:

> Between February 2006 and October 2007, ***Barclays' Derivatives Traders made at least 63 requests to external traders with the aim that those traders would pass on the requests for EURIBOR and US dollar LIBOR submissions to their banks' submitters. 56 of those requests related to EURIBOR submissions. Five Derivatives Traders made the requests to external traders.***

Barclays FSA ¶ 89 (emphasis added).

171. The Barclays Settlements do not identify the other banks who participated in the agreement, but at least some were members of the USD LIBOR panel. *See id* ¶¶ 23–24; FSA Final Notice ¶ 82; CFTC Order at 28.

172. There is direct evidence that Barclays colluded with another USD LIBOR panel bank to collude to manipulate USD LIBOR, in order to benefit Barclays' trading positions.

> On 28 February 2007, Trader B made a request to an external trader in relation to three month US dollar LIBOR: "*duuuude ... whats up with ur guys 34.5 3m fix ... tell him to get it up!!*" the external trader responded "*ill talk to him right away*".

Barclays FSA ¶ 91.

173. Similarly, another trader from an unidentified financial institution requested that Barclays set its LIBOR quote low: "I know I'm asking for much, but ONLY if u guys care, a low 3m libor would be great…anywhere below 5.35…thanks dude." DOJ SOF ¶¶ 27.

G. <u>Defendants Conspired to Manipulate Yen and USD LIBOR</u>

174. The conspiracy to manipulate the Japanese Yen and U.S. Dollar ("USD") LIBOR to benefit the banks' bottom lines and profitability, whether to benefit trading positions directly or to mask illiquidity, is part of the same global conspiracy to manipulate LIBOR settings for the benefit of the Defendant member banks.

175. There is significant overlap of persons and entities involved in the conspiracy to manipulate Yen and USD LIBOR. 13 banks were involved in conspiring to manipulate both USD and Yen LIBOR. Many of the same individuals were involved in manipulating both currencies, including in some instances common managerial oversight of manipulating both currencies.

a. At UBS, the same managers oversaw and knew about the conspiracy to manipulate Yen and USD LIBOR. As set forth above, on August 9, 2007, the ALM global head emailed a senior manager in Group Treasury, "the manager of the derivatives trading desk that submitted the majority of UBS's LIBOR contributions." The email stated:

> it is highly advisable to err on the low side with fixings for the time being to protect our franchise in these sensitive markets. Fixing risk and [profit and loss] thereof is secondary priority for now.

UBS DOJ SOF ¶105. A footnote indicates that "the email's reference to 'fixing risk' and profit and loss reflect an awareness that others at UBS were manipulating LIBOR to benefit trading positions." *Id.*

b. At RBS, in some instances the same people were involved in manipulating Yen and USD LIBORs, as they held positions that required both USD and Yen LIBORs to move in particular directions. For example, on August

17, 2007, two RBS traders discussed their planned manipulation of both USD and Yen LIBORs: "so on Monday, usd libor will drop 5bps ..but jpy [LIBOR] will only follow suit a few days later." RBS CFTC 17.

c. Other individuals were involved in both USD and Yen collusion. For example, when Mr. Hayes asked a broker to speak to someone about Yen LIBOR collusion, the broker noted: "[Yen Bank K] rite i know him he speak to my dolla desk thats where r orders come from ill have a word with him amnd ask to get it up ok mate." CFTC 32.

176. Market participants commonly expressed the view that the collusive manipulation of LIBOR was widespread throughout the world.

a. In August 2007, a senior RBS trader of Yen LIBOR told one of his colleagues that LIBOR is a "cartel now in London." RBS CFTC Order at 14.

b. According to the Singapore lawsuit, Todd Morakis, who was the managing director at RBS, "orally confirmed to [Tan] round October [2011] that 'the practice of requesting to change the rate Libor is common in every rate setting environment in the banking industry.'"

c. A RBS Submitter "observed to a Broker during the financial crisis that, in the absence of liquidity, "people are just setting LIBORs to suit their books" and "it's just where you've got your fixings really…." RBS FSA ¶ 73.

d. Johnny Cameron, the former Chairman of Global Banking and Markets at RBS Group, characterized the LIBOR manipulation efforts as "a cartel of people across a number of banks who felt they could fix it." (Parliamentary Commission on Banking Standards, Feb. 11, 2013; Testimony of Johnny Cameron.).

177. The time periods of the collusion overlapped. The Yen LIBOR collusion persisted through the entire period of the USD LIBOR collusion.

178. The conspirators used similar means to collude, including by sharing advance confidential pricing information.

a. For example, "Trader B of the Cooperating Party communicated with an IRD trader at Citi. They discussed their trading positions, advance[] knowledge of Yen LIBOR submissions by their banks and others, and aligned their trading positions. They also acknowledged efforts to get their banks to submit the rates they wanted." UBS SOF ¶176.

b. In the case of at least one bank, the instruction to suppress USD LIBOR extended to all currencies. For example, "in 2008, UBS Group Treasury instituted a policy of submitting LIBORs for all currencies, including Swiss Franc, in the middle of the pack of other banks' expected LIBOR submissions." UBS DOJ SOF ¶129.

179. In many instances, the same individuals at banks oversaw the submission process for multiple currencies.

a. At Barclays, "Barclays' senior U.S. Dollar LIBOR submitter also had oversight responsibility for the submission of Barclays' Yen LIBOR which was handled daily by other submitters." CFTC p. 7, n. 7. And "Barclays' employees on its money markets desk in London have been responsible for contributing Barclays's Dollar, Sterling, and Yen LIBOR and its EURIBOR submissions ("submitters").

b. At RBS, "[o]ne money market trader was primarily responsible for making both the Yen and Swiss Franc LIBOR submissions." CFTC at 5.

180. Bob Diamond, the former head of Barclays, told the British Parliament the day after he stepped down last year: "There is an industry-wide problem coming out now."

181. To the extent that panel banks suppressed LIBOR submissions for other currencies, but engaged in some upward manipulation of that same currency on individual days to benefit their trading positions during the same period, there is no inconsistency: movements upward to benefit individual trading positions were often a few basis points, whereas the systemic suppression was a much larger

scale. For instance, the day after the ALM global head's dictate, UBS's USD LIBOR submission plummeted ***50 basis points***. But in every event, manipulation of LIBOR was done for the same reason—to promote the profitability of the banks at the expense of their customers, the BBA's rules, and the general public.

182. At the very least, for the foregoing reasons, the conspiracy to manipulate Yen LIBOR is highly probative of the conspiracy to suppress USD LIBOR.

H. Government Investigations Reveal the Global Scope of the LIBOR Manipulation Conspiracy by Defendants and Unnamed Co-Conspirators

183. Government investigations of the LIBOR manipulation scandal are underway around the world and are ongoing in the United States, the United Kingdom, Switzerland, Japan, Canada, the European Union and Singapore. In the United States, multiple governmental agencies, including the Department of Justice ("DOJ"), the Securities and Exchange Commission ("SEC") and the Commodity Futures Trading Commission ("CFTC") have all been involved in the LIBOR probe. The CFTC has been the lead agency investigating LIBOR in the United States. In the United Kingdom, the Financial Services Authority ("U.K. FSA") has been the lead agency investigating LIBOR manipulation.

184. According to an article published by the *Wall Street Journal* on March 18, 2011, governmental authorities around the world are attempting to determine "whether banks whose funding costs were rising as the financial crisis intensified tried to mask that trend by submitting artificially low readings of their daily borrowing costs." Though the proceedings are ongoing, several Defendants have admitted that government entities - including the DOJ, the SEC, and the CFTC - have targeted them in seeking information about potential misconduct. All of the Defendants are implicated in this conspiracy, either through their own admission, through direct evidence demonstrating their involvement with the

conspiracy, or through statistical analyses showing that their LIBOR submissions were not accurate reflections of their true borrowing costs.

185. To date, three BBA member banks have essentially admitted to the existence of worldwide LIBOR manipulation and their involvement in the conspiracy. On June 27, 2012, Defendant Barclays announced it was entering into a settlement agreement with the U.K. FSA, the U.S. CFTC and the U.S. DOJ's Fraud Section for its role in LIBOR manipulation and to resolve the ongoing investigation against it. As part of the settlement, Barclays agreed to pay £290 million ($453.6 million) to regulators. In addition, Barclays agreed to cooperate with investigators and provided volumes of evidence revealing the LIBOR conspiracy. Only some of that evidence has been made public but the information publically available demonstrates that this did not involve isolated moments of LIBOR manipulation by rogue employees but a wide-ranging conspiracy involving all of the Defendants at all levels of their respective institutions.

186. UBS, another Defendant, has sought amnesty from the U.S. D.O.J. and the Swiss Competition Commission. Pursuant to that amnesty application, UBS has agreed to cooperate fully with the authorities. UBS' cooperation implicates not only itself in the LIBOR manipulation conspiracy but also numerous other Defendants who communicated with and conspired with UBS to manipulate and artificially suppress LIBOR.

187. On December 19, 2012, Defendant UBS announced it was entering a settlement agreement with the U.K. FSA, the U.S. CFTC, the U.S. DOJ's Fraud Section, and the Swiss Financial Markets Authority for its role in LIBOR manipulation and to resolve the ongoing investigation against it. As part of the settlement, UBS agreed to pay $1.5 billion to regulators, and subsidiary UBS Securities Japan Co. Ltd. agreed to plead guilty to felony wire fraud. On the same day, criminal conspiracy charges were unsealed in the Southern District of New

York against two former senior UBS traders, Tom Alexander William Hayes and Roger Darin, for their roles in manipulating Yen-LIBOR.

188. On February 6, 2013, Defendant RBS announced a settlement with the U.K. FSA, and the U.S. CFTC and DOJ's Fraud Section. RBS agreed to pay approximately $612 million to regulators and its subsidiary, RBS Securities Japan Limited, agreed to plead guilty to felony wire fraud.

189. According to an article published by *Reuters* on July 22, 2012, government authorities in the United States and Europe have informed the defense attorneys for numerous executives of the Defendant banks that they plan to arrest and indict many of these individuals. According to reports, there have been on-going discussions between the defense attorneys with various government authorities regarding potential pleas by the individual executives in exchange for their cooperation to provide evidence demonstrating Defendant banks' involvement in the LIBOR manipulation conspiracy.

190. Evidence obtained from the government investigations of certain Defendants, such as Barclays, UBS, and RBS, as well as the publically disclosed documents from those produced by other Defendants to government investigators demonstrates that US Dollar LIBOR was manipulated as part of the global conspiracy. Furthermore, documents submitted in connection with legal proceedings in Canada, Singapore and Japan reveal that certain Defendants also underreported their borrowing costs to artificially suppress Yen-LIBOR and LIBOR for other currencies.

1. Public Documents and Regulatory Filings Reveal Defendants' Involvement in LIBOR Manipulation

191. The first public revelation regarding government investigations into possible LIBOR manipulation occurred on March 15, 2011, when Defendant UBS disclosed in a Form 20-F, an annual report filed with by foreign corporations with the SEC, that the bank had "received subpoenas" from the SEC, the CFTC, and the

DOJ "in connection with investigations regarding submissions to the [BBA]." UBS stated it understood "that the investigations focus on whether there were improper attempts by UBS, either acting on its own or together with others, to manipulate LIBOR rates at certain times." UBS further disclosed that it had "received an order to provide information to the Japan Financial Supervisory Agency concerning similar matters." UBS stated it was "conducting an internal review" and was "cooperating with the investigations." Prior to that date, the Defendants adamantly denied manipulating LIBOR or conspiring to manipulate LIBOR. Defendants denied that any anomalies in LIBOR were the result of any fraud and intentional malfeasance.

192. The manipulation of LIBOR may have been going on since as early as 2006. On March 16, 2011, the *Financial Times* reported that Defendants UBS, Bank of America, Citigroup, and Barclays were all subpoenaed by U.S. regulators "probing the setting of" US Dollar LIBOR "between 2006 and 2008." The *Financial Times* also reported that investigators had "demanded information from" "all 16 members of the committee that helped the [BBA] set the dollar Libor rate during 2006-08 received informal requests for information." The investigation that followed uncovered significant evidence showing that all 16 of the former members of the US Dollar LIBOR Contributor Panel were involved with the LIBOR manipulation conspiracy.

193. On March 16, 2011, *MarketWatch* similarly reported that "[m]ultiple U.S. and European banks, which provide borrowing costs to calculate Libor every day, have been contacted by investigators," including the DOJ, the SEC, and the CFTC.

194. On March 17, 2011, *Bloomberg* reported that Defendants Barclays and Citigroup had received subpoenas from U.S. regulators and that Defendants WestLB, Lloyds, and Bank of America also had been contacted by regulators.

195. On March 23, 2011, *Bloomberg* reported that Defendants Citigroup, Deutsche Bank, Bank of America and JPMorgan had been directed by U.S. regulatory authorities "to make employees available to testify as witnesses" in connection with the ongoing investigation into the LIBOR manipulation conspiracy.

196. On March 24, 2011, the *Financial Times* of London reported that Defendant Barclays was "emerging as a key focus of the US and UK regulatory probe into alleged rigging of [LIBOR]." Barclays would eventually be the first financial institution to settle and cooperate with investigators by providing documents and other information showing how it conspired with the other Defendants to manipulate LIBOR. Furthermore, according to the *Financial Times*, investigators were "probing whether communications between [Barclays'] traders and its treasury arm," which helps set LIBOR, "violated 'Chinese wall' rules that prevent information-sharing between different parts of the bank." Barclays' traders had an unlawful vested interest in controlling LIBOR rates, and therefore should have been walled off from the treasury department which handles Barclays' LIBOR submissions. The *Financial Times* further reported that investigators were "said to be looking at whether there was any improper influence on Barclays' submissions" during 2006-2008.

197. In an "Interim Management Statement" filed on April 27, 2011, Defendant Barclays stated it was "cooperating with" the investigations by the FSA, the CFTC, the SEC, and the DOJ "relating to certain past submissions made by Barclays to the [BBA], which sets LIBOR rates."

198. On May 6, 2011, Defendant RBS similarly disclosed in a Form 6-K filed with the SEC that it was "co-operating with" the investigations being conducted by the CFTC, SEC, and the European Commission "into the submission of various LIBOR rates by relevant panel banks."

199. Ten days later, on May 16, 2011, Defendant Lloyds disclosed that it "had received requests for information as part of the Libor investigation and that it was co-operating with regulators, including the [CFTC] and the European Commission." The *London Daily Telegraph* reported that Defendant HBOS, which merged with Lloyds in January 2009 to form the Lloyds Banking Group, "was the main target given its near collapse in late 2008 as it lost access to wholesale funding markets."

200. On May 23, 2011, the *Daily Telegraph* further reported that the United States Federal Bureau of Investigation ("FBI") had become involved and was working closely with U.S. and Foreign regulatory authorities in connection to the LIBOR probe. The U.K. Serious Fraud Office, which handles criminal investigations into financial matters, "revealed it is also taking an active interest" in the LIBOR probe. Announcing the involvement of the FBI and the U.K. Serious Fraud Office made clear that the LIBOR manipulation investigation had gone beyond merely a civil probe, but raised the specter that criminal arrests and charges were not only possible but likely.

201. On July 26, 2011, UBS filed a Form 6-K filed with the SEC in which it disclosed that it had requested and been granted conditional immunity from criminal charges and was eligible for reduced civil penalties as a result of its admission that it had engaged in a conspiracy with the other Defendants to manipulate LIBOR.

202. On August 1, 2011, in an interim report, Defendant HSBC disclosed that it and/or its subsidiaries had "received requests" from various regulators to provide information and were "cooperating with their enquiries."

203. On September 7, 2011, the *Financial Times* reported that as part of their LIBOR investigations, the DOJ and the CFTC were assessing whether the Defendant banks violated the Commodity Exchange Act, which can result in criminal liability, by examining "whether traders placed bets on future yen and

dollar rates and colluded with bank treasury departments, who help set the Libor index, to move the rates in their direction," as well as "whether some banks lowballed their Libor submissions to make themselves appear stronger."

204. The LIBOR manipulation conspiracy involves numerous foreign currencies. On October 19, 2011, *The Wall Street Journal* reported that the European Commission "seized documents from several major banks" the previous day, "marking the escalation of a worldwide law-enforcement probe" regarding the Euro Interbank Offered Rate, or EURIBOR which is an interest rate benchmark similar to LIBOR. EURIBOR, which is set by more than 40 banks, is used to determine interest rates on trillions of Euros' worth of Euro-denominated loans and debt instruments. According to *The Wall Street Journal*, the EURIBOR inquiry constitutes "an offshoot" of the broader LIBOR investigation that had been ongoing for more than a year. According to *The Wall Street Journal*, also reported that while the list of financial firms raided by the European Commission was not available people familiar with the situation indicated that "a large French bank and a large German bank" among the targets, and the coordinated raids "occurred in London and other European cities."

205. On October 31, 2011, the *Financial News* observed that "[a]n investigation into price fixing, first ordered by the [SEC] in 2008, focused on whether banks, including UBS, Citigroup, and Bank of America, had been quoting deliberately low rates."

206. On December 9, 2011, *Law360* reported that the Japanese Securities and Exchange Surveillance Commission ("SESC") alleged that Citigroup Global Markets Japan Inc. ("CGM Japan") and UBS Securities Japan Ltd. ("UBS Japan"), which are related to Defendants Citigroup and UBS, "employed staffers who attempted to influence" the Euroyen Tokyo InterBank Offered Rate ("TIBOR") "to gain advantage on derivative trades." The SESC recommended that the Japanese prime minister and the head of Japan's Financial Services Agency ("JFSA") take

action against the companies. The SESC stated that Defendant Citigroup's head of G-10 rates and one of its traders, as well as a UBS trader, were involved in misconduct related to the TIBOR. The SESC found that, "[t]he actions of Director A and Trader B are acknowledged to be seriously unjust and malicious, and could undermine the fairness of the markets." Moreover, the SESC added, "[i]n spite of recognizing these actions, the president and CEO . . . who was also responsible for the G-10 rates, overlooked these actions and the company did not take appropriate measures, therefore, the company's internal control system is acknowledged to have a serious problem." *Law360* reported that the SESC released "a similar statement" about UBS's alleged conduct.

207. Defendants Citigroup and UBS did not deny the SESC's findings. In response, Citigroup spokesperson stated, "Citigroup Global Markets Japan takes the matter very seriously and sincerely apologizes to clients and all parties concerned for the issues that led to the recommendation. The company has started working diligently to address the issues raised." A UBS spokesperson similarly stated the bank was taking the findings "very seriously" and had been "working closely with" the SESC and the JFSA "to ensure all issues are fully addressed and resolved." She added, "We have taken appropriate personnel action against the employee involved in the conduct at issue."

208. Defendant Citigroup later disclosed that on <u>December 16, 2011</u>, the JFSA took administrative action against CGM Japan for its involvement in rate manipulation. The JFSA issued a Business Improvement Order and suspended CGM Japan's trading in derivatives related to Yen-LIBOR, as well as Euroyen and Yen-TIBOR from <u>January 10, 2012</u> to <u>January 23, 2012</u>. On the same day, the JFSA also took administrative action against Citibank Japan Ltd. for conduct arising out of Citibank Japan Ltd.'s retail business and also noted that the communications made by the CGM Japan traders to employees of Citibank Japan

about Euroyen TIBOR had not been properly reported to Citibank Japan Ltd.'s management team.

209. UBS likewise recently revealed further details regarding the Japanese regulators' findings and the resulting disciplinary action. Specifically, the bank announced that on December 16, 2011, the JFSA commenced an administrative action against UBS Japan, based on findings by the SESC that:

> (i) a trader of UBS Securities Japan engaged in inappropriate conduct relating to Euroyen TIBOR and Yen LIBOR, including approaching UBS AG, Tokyo Branch, and other banks to ask them to submit TIBOR rates taking into account requests from the trader for the purpose of benefitting trading positions; and
>
> (ii) serious problems in the internal controls of UBS Securities Japan resulted in its failure to detect this conduct.

210. Based on the findings of the SESC, the JFSA "issued a Business Suspension Order requiring UBS Securities Japan to suspend trading in derivatives transactions related to Yen LIBOR and Euroyen TIBOR" from January 10, 2012 to January 16, 2012, with a few limited exceptions. The JFSA also issued a Business Improvement Order requiring UBS Japan to enhance "compliance with its legal and regulatory obligations" and to establish a "control framework" designed to prevent similar improper conduct. Based on the evidence uncovered to date by government investigators, prosecutors and regulators, the manipulation engaged in by CGM Japan and UBS Japan, which resulted in trading suspensions and Business Improvement Orders was not limited to Japan and these two entities but was widespread amongst the Defendants.

211. According to The *Wall Street Journal*, the UBS trader who was involved in the rate manipulations at UBS Japan was Thomas Hayes, who joined UBS Japan in 2006 "and traded products linked to the pricing of short-term yen-denominated borrowings." Mr. Hayes worked at UBS Japan for about three years. Criminal conspiracy charges against Mr. Hayes and fellow former UBS senior trader Roger Darin were unsealed on December 19, 2012.

212. Throughout the end of 2011 and the beginning of 2012, there were numerous articles relating to government investigations and probes relating to illegal collusion and agreements amongst the BBA member banks, the Defendants in this litigation, to manipulate LIBOR and other global benchmark interest rates. For example, on February 3, 2012, Defendant Credit Suisse disclosed that the Swiss Competition Commission commenced an investigation involving twelve banks and certain other financial intermediaries, including Defendant Credit Suisse, concerning potential collusion among traders to affect and influence the bid ask spread for derivatives tied to the LIBOR and TIBOR reference rates fixed with respect to certain currencies by manipulating the rates.

213. Additionally, on February 14, 2012, *Bloomberg* reported that two people with knowledge of the ongoing LIBOR probe disclosed that global regulators "have exposed flaws in banks' internal controls that may have allowed traders to manipulate interest rates around the world." The same people, who were not identified by name (as they were not authorized to speak publicly about those matters), added that investigators also had "received e-mail evidence of potential collusion" between the banks that set LIBOR. According to Bloomberg's sources, the FSA was "probing whether banks' proprietary-trading desks exploited information they had about the direction of Libor to trade interest-rate derivatives, potentially defrauding their firms' counterparties."

214. *Bloomberg* further reported that Defendant RBS had "dismissed at least four employees in connection with the probes," and Defendants Citigroup and Deutsche Bank "also have dismissed, put on leave or suspended traders as part of the investigations."

215. According to *Bloomberg's* February 14, 2012 article, European Union antitrust regulators joined the investigation regarding whether the Defendant banks formed a global cartel and coordinated falsifying their reported borrowing costs in response to the economic crisis that began in 2007. All of the Defendants

had a joint vested interest to create the illusion that they were in good financial health and used LIBOR reporting as an opportunity to improve their own trading position in LIBOR-linked transactions and financial instruments.

216. In March of 2012, the Monetary Authority of Singapore disclosed that it had been approached by regulators from other countries to join in the probe of possible manipulation of global benchmark interest rates. The investigation of the Monetary Authority of Singapore has revealed widespread collusion amongst the Defendants, operating across the world, to manipulate global benchmark interest rates.

217. On January 24, 2013, the *Daily Mail* reported that documents released in connection with litigation in London identified 104 current and former Barclays employees whose emails were turned over to U.K. regulators in their probe of Barclays.

218. On January 25, 2013, the *Financial Times* reported that evidence presented in the litigation indicated that top executives at Barclays knew as early as November 2007 that Barclays was suppressing LIBOR submissions.

219. On February 12, 2013, the *Wall Street Journal* reported that the U.S. DOJ and CFTC are investigating interdealer brokers ICAP PLC and R.P. Martin Holdings Ltd.

220. According to the *Daily Mail*, investigations by the SEC, the FSA, the Swiss Competition Commission, and regulators in Japan have focused on three areas of concern about interest rate manipulation. The first area of concern is whether banks artificially suppressed LIBOR during the financial crisis, making Defendants' financial status appear more secure than in actuality. The second area of concern is whether bankers setting LIBOR transactions leaked their data to traders before officially providing the banks' LIBOR submissions to the BBA. The third area of concern is whether and to what extent traders at the Defendant banks and at other organizations (such as hedge funds), influenced LIBOR by

making suggestions or demands on the bankers for the other Defendants to set LIBOR and other global benchmark interest rates at specific levels. By colluding on their LIBOR submissions the Defendants were able to manipulate LIBOR-linked transactions and financial instruments in their favor to the detriment of their transactional counterparties and other investors in LIBOR-based financial instruments, including Plaintiff.

221. The LIBOR manipulation investigations have begun to bear fruit in recent months, with Barclays, UBS, and RBS's settlements. As part of those settlements, Barclays, UBS and RBS agreed to cooperate with authorities, and Barclays and UBS have admitted that there was a worldwide conspiracy to manipulate LIBOR and other global benchmark interest rates and that their traders were involved in that conspiracy. Through their cooperation which includes volumes of documentary evidence, including e-mails, Instant Messages and other forms of communication, there is significant evidence implicating the other Defendants in the global conspiracy to manipulate LIBOR. Furthermore, with the pending criminal indictments of the Defendant banks' individual traders and executives, government prosecutors have, in their opinion, accumulated sufficient evidence to meet the criminal burden of proof for convicting Defendants' executives and traders for their involvement in the manipulation of LIBOR and other global benchmark interest rates. Finally, there are reports that most, if not all, of the Defendants (who are the members of the US Dollar Contributor Panel for LIBOR) are negotiating a potential group settlement with global prosecutors and regulators regarding the LIBOR manipulation conspiracy.

2. <u>Barclays Settles Criminal and Civil Claims In Exchange for Cooperating with Prosecutors and Regulatory Authorities in the United Kingdom and United States</u>

222. Barclays' was one of the major players in the LIBOR manipulation and avoided prosecution in the U.K. and U.S. by entering into settlements with the FSA, CFTC, and DOJ's Fraud Section. In the United Kingdom, as part of the

settlement with the FSA, Barclays agreed to pay £290 million ($453.6 million) in fines. A copy of the Non-Prosecution Agreement between Barclays and the DOJ's Fraud Section is attached hereto as **Exhibit 1**.

223. In the United States on June 27, 2012, the CFTC issued an *Order Instituting Proceedings* ("CFTC Order") finding that Barclays PLC, Barclays Bank PLC and Barclays Capital Inc. violated Sections 6(c), 6(d) and 9(a)(2) of the Commodity Exchange Act, 7 U.S.C. §§ 9, l3b and 13(a)(2) (2006). Significant portions of the CFTC Order are cited earlier herein to show the existence and extent of the LIBOR conspiracy.

224. The investigations that led to Barclays' settlements uncovered numerous documents demonstrating Barclays' involvement in the LIBOR manipulation conspiracy. On numerous occasions, between January 2005 and June 2009, Barclays' derivatives traders made requests to its Submitters[80] to make false submissions that favored their trading positions vis-à-vis their transactional counterparties and other investors in LIBOR-based financial instruments, such as Plaintiff. The majority of these requests came from traders on Barclays' New York Interest Rate Swaps Desk ("NY Swaps Desk") located in New York and London and involved U.S. Dollar LIBOR. These included requests made on behalf of derivatives traders at other banks. The derivatives traders were motivated to benefit Barclays' trading positions, not to accurately report Barclays' actual lending and borrowing rates, which is what Barclays was required to do. The aim of these requests was to influence the calculation of the final benchmark interest rates, including LIBOR. The derivatives traders openly discussed the requests at their desks. At least one derivatives trader at Barclays would shout across the euro Swaps Desk to confirm that other traders had no conflicting rate preferences prior to making a request to the Submitters.

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[80] Submitters are the individuals responsible for providing Barclays' daily submissions for benchmark interest rates such as LIBOR.

225. The CFTC found that senior traders on Barclays' NY Swaps Desk instructed several other swaps traders to make the requests of the LIBOR submitters on Barclays' London Money Market Desk for certain LIBOR submissions in order to move their LIBOR submissions in a direction to benefit the desk's derivatives trading positions. The traders' conduct was common and pervasive, and known by other traders and trading desk managers located near the Interest Rate Swaps Desk, both in New York and London. The traders never attempted to conceal their discussions and rate requests from supervisors at Barclays.

226. Requests by derivative traders to submit false ratings to Barclays' Submitters were made verbally, by e-mail and by instant message. On a few occasions, some traders would even make entries in their electronic calendars to remind themselves what requests to make of Barclays' LIBOR submitters the next day. **There is both testimonial and documentary evidence showing the manipulation of LIBOR rates by Barclays' derivatives traders**.

227. The Barclays' traders' false rate requests, whether internal or external, typically concerned one-month and three-month U.S. Dollar LIBOR submissions. The traders' requests also included either a specific rate to be submitted or the direction, higher or lower, that they wanted Barclays' LIBOR submission to move. Sometimes the traders would ask submitters to try and have Barclays excluded from the LIBOR calculation by being in the top or bottom quartile in an attempt to influence the fixing of LIBOR. The following are examples of numerous trader requests uncovered by the CFTC:

> ***"WE HAVE TO GET KICKED OUT OF THE FIXINGS TOMORROW!! We need a 4.17 fix in 1m (low fix) We need a 4.41 fix in 3m (high fix)"*** (November 22, 2005, Senior Trader in New York to Trader in London);

> ***"You need to take a close look at the reset ladder. We need 3M to stay low for the next 3 sets and then I think that we will be completely out of our 3M position. Then its on. [Submitter] has to***

> ***go crazy with raising 3M Libor."*** (February 1,2006, Trader in New York to Trader in London);

> ***"Your annoying colleague again ... Would love to get a high 1m Also if poss a low 3m... ifposs ... thanks"*** (February 3, 2006, Trader in London to Submitter);

> "***This is the [book's] risk. We need low 1M and 3M libor. PIs ask [submitter] to get 1M set to 82. That would help a lot"*** (March 27,2006, Trader in New York to Trader in London);

> "***We have another big fixing tom[orrow] and with the market move I was hoping we could set the 1M and 3M Libors as high as possible"*** (May 31, 2006, Trader in New York to Submitter);

> "***Hi Guys, We got a big position in 3m libor for the next 3 days. Can we please keep the lib or fixing at 5.39 for the next few days. It would really help. We do not want it to fix any higher than that. Tks a lot."*** (September 13, 2006, Senior Trader in New York to Submitter);

> "***For Monday we are very long 3m cash here in NY and would like the setting to be set as low as possible ... thanks"*** (December 14, 2006, Trader in New York to Submitter); and

> ***"PIs. go for 5.36 Libor again tomorrow, very long and would be hurt by a higher setting ... thanks."*** (May 23, 2007, Trader in New York to Submitter).

228. The LIBOR submitters regularly considered the traders' requests when determining and making Barclays' U.S. Dollar LIBOR submissions. To accommodate the traders, the submitters would move Barclays' U.S. Dollar LIBOR submissions by one or more basis points in the direction requested by traders.

229. The submitters frequently responded to traders that they would accommodate their requests, often by saying "sure," "will do my best," or similar agreements. The following are examples of numerous trader requests uncovered by the CFTC:

> "***Am going 13. think market will go 12-12 ~."*** (November 14, 2005, Submitter's response to a swaps trader request for a very high one-month U.S. Dollar LIBOR submission, preferably a submission of "13+");

> "***[Senior Trader] owes me!"*** (February 7, 2006, Submitter's response when swaps trader called him a ***"superstar"*** for moving Barclays' U.S. Dollar LIBOR submission up a basis point more than the

submitter wanted and for making a submission with the intent to get ***"kicked out"***);

"Going 58 [in 1 month] and 73 [in 3 month] and fully expecting to be knocked out." (February 8, 2006, Submitter's response to a swaps trader request for high one-month and three-month LIBOR submissions);

"For you ... anything. I am going to go 78 and 92.5. It is difficult to go lower than that in threes. looking at where cash is trading. In fact, if you did not want a low one I would have gone 93 at least." (March 16, 2006, Submitter's response to swaps trader's request for a high one-month and low three-month U.S. Dollar LIBOR);

"Always happy to help, leave it with me, Sir." (March 20,2006, Submitter's response to a request);

"Done ... for you big boy ..." (April 7, 2006, Submitter's response to swaps trader requests for low one-month and three-month U.S. Dollar LIBOR); and

"Set it at 5.345 against a consensus of 34." (March 5, 2007, Submitter's response to swaps trader request for high three-month U.S. Dollar LIBOR).

230. Requests were made by Barclays' US Dollar derivatives traders on 16 out of the 20 days on which Barclays made US Dollar LIBOR submissions in February 2006 and on 14 out of the 23 days on which it made US Dollar LIBOR submissions in March 2006.

231. Just as the NY Swaps Desk openly discussed requests to LIBOR submitters, Barclays' Euro Swaps traders' requests to Barclays' Euribor submitters to change their submissions to benefit the traders' derivatives trading positions were an open and common practice on the desk. Multiple traders engaged in this conduct, and no attempt was made by any of the traders to conceal the requests from supervisors at Barclays during the more than four-year period in which the activity occurred.

232. After determining how moves in EBF Euribor would affect the desk's profitability, Barclays' Euro swaps traders contacted the Euribor submitters, including via email and through an instant messaging system, to request that the submissions be moved either higher or lower in a particular tenor. On a few

occasions, one swaps trader made entries in electronic calendars to remind himself what requests to make of Barclays' Euribor submitters the next day.

233. Additionally, one former Barclays' senior Euro swaps trader on occasion sent requests to alter Barclays' Euribor submissions to his former fellow traders after he had left Barclays and was employed by other financial institutions. He made the requests to benefit his derivatives trading positions. These requests were made at a minimum by email or by instant message. The following are examples of the communications between the traders and submitters uncovered by the CFTC:

June 1, 2006:

- Senior Euro Swaps Trader: ***"Hi [Euribor Submitter], is it too late to ask for a low 3m?"***
- Euribor Submitter: ***"Just about to put them in ..... so no."***

September 7, 2006:

- Senior Euro Swaps Trader: ***"I have a huge 1m fixing today and it would really help to have a low 1m tx a lot."***
- Euribor Submitter: ***"I'll do my best."***
- Senior Euro Swaps Trader: ***"because I am aware some other bank need a very high one ... .if you could push it very low it would help. I have 50bn fixing."***

October 13, 2006:

- Senior Euro Swaps Trader: ***"I have a huge fixing on Monday ... something like 30bn 1m fixing ... and I would like it to be very very very high ..... Can you do something to help? I know a big clearer will be against us ... and don't want to lose money on that one."***
- Euribor Submitter forwarded the request to another Euribor submitter, advising: ***"We always try and do our best to help out. ...."***

- Senior Euribor Submitter to Senior Euro Swaps Trader: ***"By the way [Euribor Submitter] tells me that it would be good to see a high lmth fix on Monday, we will pay for some cash that morning so hopefully that will help."***

January 12, 2007:

- Senior Euro Swaps Trader: ***"hi [Euribor Submitter]. we need a low 1m in the coming days if u can .... "***
- Senior Euribor Submitter: ***"hi [Senior Euro Swaps Trader], we will keep the 1mth low for a few days."***

April 2, 2007:

- Euro Swaps Trader: ***"hello [Senior Euribor Submitter], could you please put in a high 6 month euribor today?"***
- Senior Euribor Submitter: ***"will do."***

July 29, 2008:

- Euro Swaps Trader to Senior Euro Swaps Trader: ***"I was discussing the strategy [to get a high fixing] with [Senior Euribor Submitter] earlier this morning - today he will stay bid in the mkt and put a high fixing but without lifting any offer, and then he will be really paying up for cash tomorrow and Thursday which is when the big positive resets are."***

234. The CFTC found that during the period from at least mid-2005 through mid-2008, certain Barclays Euro swaps traders, led by the same former Barclays' senior Euro swaps trader, coordinated with traders at certain other panel banks to have their respective Euribor submitters make certain Euribor submissions in order to affect the official EBF Euribor fixing.

235. The former Barclays senior Euro swaps trader, while still employed by Barclays, spoke daily with traders at certain panel banks concerning their respective derivatives positions in order to determine how to change the official EBF Euribor fixing in a manner that benefitted their derivatives positions.

236. In these conversations, the traders agreed to contact their respective Euribor submitters to request the agreed-upon Euribor submission. The following are examples uncovered by the CFTC and FSA of the communications among the

Barclays Senior Euro Trader, Barclays' Euribor submitters and traders at other banks:

August 14, 2006:

- Trader at Bank A asked Barclays' Senior Euro Swaps Trader to request a low one month and high three month and six month Euribor.
- Barclays' Senior Euro Swaps Trader agreed to do so and promised to contact the trader at Bank B to make the same request.
- Barclays' Senior Euro Swaps Trader emailed the Barclays Senior Euribor Submitter: ***"We have some big fixings today. Is it possible to have a very low 1m and high 3m and 6m? Thx a lot for your help."***
- Barclays' Senior Euribor Submitter responded: ***"Sure, will do."***

November 10, 2006:

- Trader at Bank A asked Barclays' Senior Euro Swaps Trader to request a low one month Euribor setting at Barclays and at Bank B.
- Barclays' Senior Euro Swaps Trader made the request of the trader at Bank B.
- Barclays' Senior Euro Swaps Trader emailed the request to the Barclays Senior, Euribor Submitter: ***"hi [Senior Euribor Submitter]. I know you can help. On Monday we have a huge fixing on the 1m and we would like it to be low if possible. Tx for your kind help."***
- Barclays' Senior Euribor Submitter replied: ***"of course we will put in a low fixing."***

November 13, 2006:

- Barclays' Senior Euro Swaps Trader discussed the need for low one month Euribor with traders at Bank A and Bank B, and contacted a trader at Bank C.
- Barclays' Senior Euro Swaps Trader then reminded Barclays' Senior Euribor Submitter of his request from Friday: ***"hi [Senior Euribor Submitter]. Sorry to be a pain but just to remind you the importance of a low fixing for us today."***

- Barclays' Senior Euribor Submitter replied: ***"no problem, I had not forgotten. The [voice] brokers are going for 3.372, we will put in 36 for our contribution;"***
- Barclays' Senior Euro Swaps Trader's responded: ***"I love you."***

<u>December 5, 2006</u>:

- Barclays' Senior Euro Swaps Trader requested that traders at Banks A, Band C have their Euribor submitters make a high six month Euribor submission.
- When the trader at Bank C stated that he needed the same submission, Barclays' Senior Euro Swaps Trader agreed to make the request of the Barclays Euribor submitters.
- Barclays' Senior Euro Swaps Trader emailed the Barclays Senior Euribor Submitter: ***"hi [Senior Euribor Submitter] is it possible to have a high 6m ficxing [sic]? Where do you think it will fix?"***
- Barclays' Senior Euribor Submitter responded: ***"Hi [Senior Euro Swaps Trader]. we have posted 3.73, hope that helps .. can put in higher if you like?"***
- Barclays' Senior Euro Swaps Trader replied: ***"thats fine tx a lot for your help."***

<u>February 12, 2007</u>:

- Barclays' Senior Euro Swaps Trader agreed with traders at Banks A and B to have their respective one month Euribor submissions lowered.
- Barclays' Senior Euro Swaps Trader submitted that request to the Barclays Senior Euribor Submitter, stating: ***"hi [Senior Euribor Submitter]. Is it possible to have a low 1m fix today?"***
- Barclays' Senior Euribor Submitter replied: ***"will do."***

237. The Financial Services Authority ("FSA") also released on June 27, 2012 a Final Notice ("FSA Final Notice") which imposed on Barclays Bank PLC a financial penalty of £59.5 million in accordance with section 206 of the Financial Services and Markets Act 2000.

238. The FSA made several findings regarding Barclays' involvement in a LIBOR manipulation conspiracy, finding that Barclays violated several principles

of the FSA's Principles for Businesses. FSA's Principles for Businesses set forth the rules for proper business practices in the financial services industry. The FSA determined, based on the evidence set forth in this memo, and other evidence (some of which has not yet been publically disclosed) that Barclays' was engaged in widespread and pervasive wrongdoing in regards to its LIBOR and EURIBOR submissions.

239. The FSA has found that: (1) between January 2005 and May 2009, at least 173 requests for US Dollar LIBOR submissions were made by derivative traders to Barclays' Submitters (including 11 requests based on communications from derivatives traders at other banks); (2) between September 2005 and May 2009, at least 58 requests for EURIBOR submissions were made by derivatives traders to Barclays' Submitters (including 20 requests based on communications from derivative traders at other banks); and (3) between August 2006 and June 2009, at least 26 requests for Yen LIBOR submissions were made to Barclays' Submitters.

240. At least 14 derivatives traders at Barclays were involved in this manipulation, including several senior derivative traders. In addition, trading desk managers received or participated in inappropriate communications on, at least, the following occasions: (1) on March 22, 2006, Trader A (a US Dollar derivatives trader) stated in an email to Manager A that Barclays' Submitter ***"submits our settings each day, we influence our settings based on the fixings we all have"***; (2) on February 5, 2008, Trader B (another US Dollar derivatives trader) stated in a telephone conversation with Manager B that Barclays' Submitter was submitting ***"the highest LIBOR of anybody […] He's like, I think this is where it should be. I'm like, dude, you're killing us"***. Manager B instructed Trader B to: ***"just tell him to keep it, to put it low"***. Trader B said that he had "begged" the Submitter to put in a low LIBOR submission and the Submitter had said he would ***"see what I can do"***; and (3) in July 2008, euro

derivatives traders sent emails to Manager C indicating that they had spoken to Barclays' Submitter about the desk's reset positions and he had agreed to assist them.

241. Barclays' derivative traders would request high or low submissions regularly in e-mails. On Friday, March 10, 2006, two US Dollar derivatives traders made e-mail requests for a low three month US Dollar LIBOR submission for the coming Monday: (1) Trader C stated ***"We have an unbelievably large set on Monday (the IMM). We need a really low 3m fix, it could potentially cost a fortune. Would really appreciate any help"; (2) Trader B explained "I really need a very very low 3m fixing on Monday – preferably we get kicked out. We have about 80 yards [billion] fixing for the desk and each 0.1 [one basis point] lower in the fix is a huge help for us. So 4.90 or lower would be fantastic"***. Trader B also indicated his preference that Barclays would be kicked out of the average calculation; and (3) On Monday, March 13, 2006, the following email exchange took place:

Trader C: ***"The big day [has] arrived… My NYK are screaming at me about an unchanged 3m libor. As always, any help wd be greatly appreciated. What do you think you'll go for 3m?"***

Submitter: ***"I am going 90 altho 91 is what I should be posting".***

Trader C: ***"[…] when I retire and write a book about this business your name will be written in golden letters […]".***

Submitter: ***"I would prefer this [to] not be in any book!"***

242. The derivatives traders made requests to manipulate interest rates on a routine basis. For example, the following e-mail exchange took place on May 27, 2005:

Submitter: ***"Hi All, Just as an FYI, I will be in noon'ish on Monday […]".***

Trader B: ***"Noonish? Whos going to put my low fixings in? hehehe"***

Submitter: ***"[…] [X or Y] will be here if you have any requests for the fixings".***

243. Trader D set calendar entries on at least 4 occasions in 2006 to remind him to make requests for EURIBOR submissions: "Ask for Low Reset Rate" and "Ask for High 6M Fix". The routine nature of the requests demonstrates that Barclays' Submitters actively incorporated the requests of Barclays' derivatives traders in determining its submissions. Furthermore, there is documentary evidence of Submitters manipulating LIBOR rates at the direction of Barclays' derivatives traders.

244. In response to a request from Trader C for a high one month and low three month US dollar LIBOR submission on March 16, 2006, a Submitter responded: ***"For you…anything. I am going to go 78 and 92.5. It is difficult to go lower than that in threes, looking at where cash is trading. In fact, if you did not want a low one I would have gone 93 at least"***.

245. At 10:52 a.m. on April 7, 2006 (shortly before the submissions were due to be made), Trader C requested low one month and three month US dollar LIBOR submissions: ***"If it's not too late low 1m and 3m would be nice, but please feel free to say "no"... Coffees will be coming your way either way, just to say thank you for your help in the past few weeks"***. A Submitter responded ***"Done…for you big boy"***. On June 29, 2006, a Submitter responded to Trader E's request for EURIBOR submissions ***"with the offer side at 2.90 and 3.05 I will input mine at 2.89 and 3.04 with you guys wanting lower fixings (normally I would be a tick above the offer side)"***.

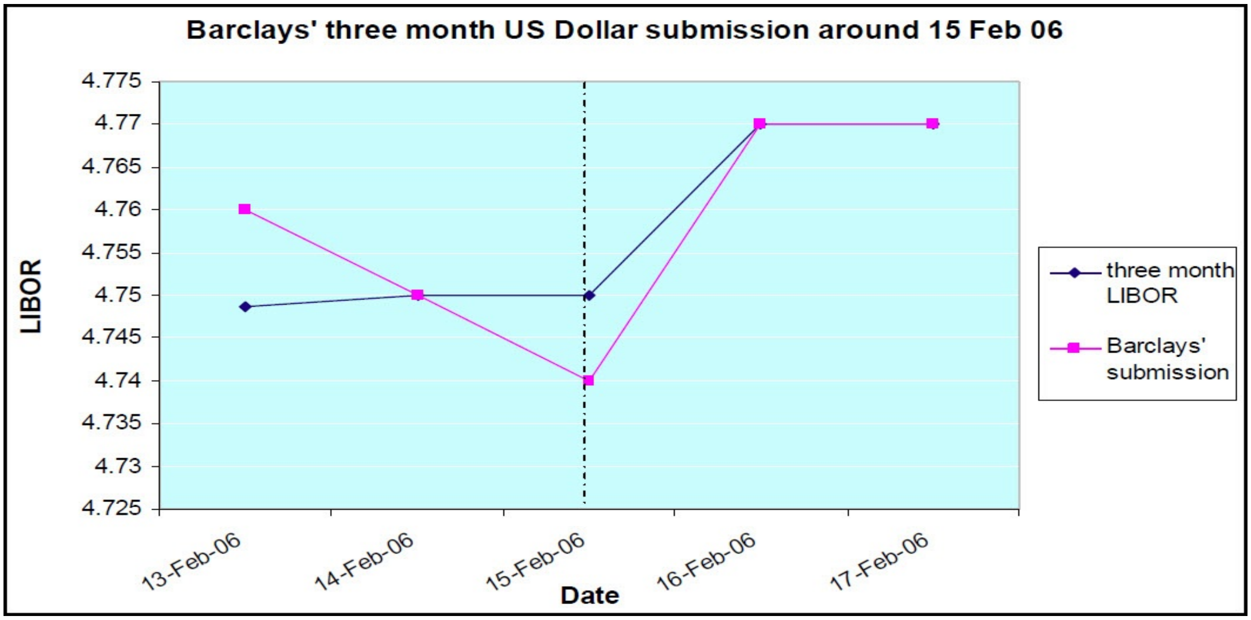
246. On August 6, 2007, a Submitter even offered to submit a US Dollar rate higher than that requested:

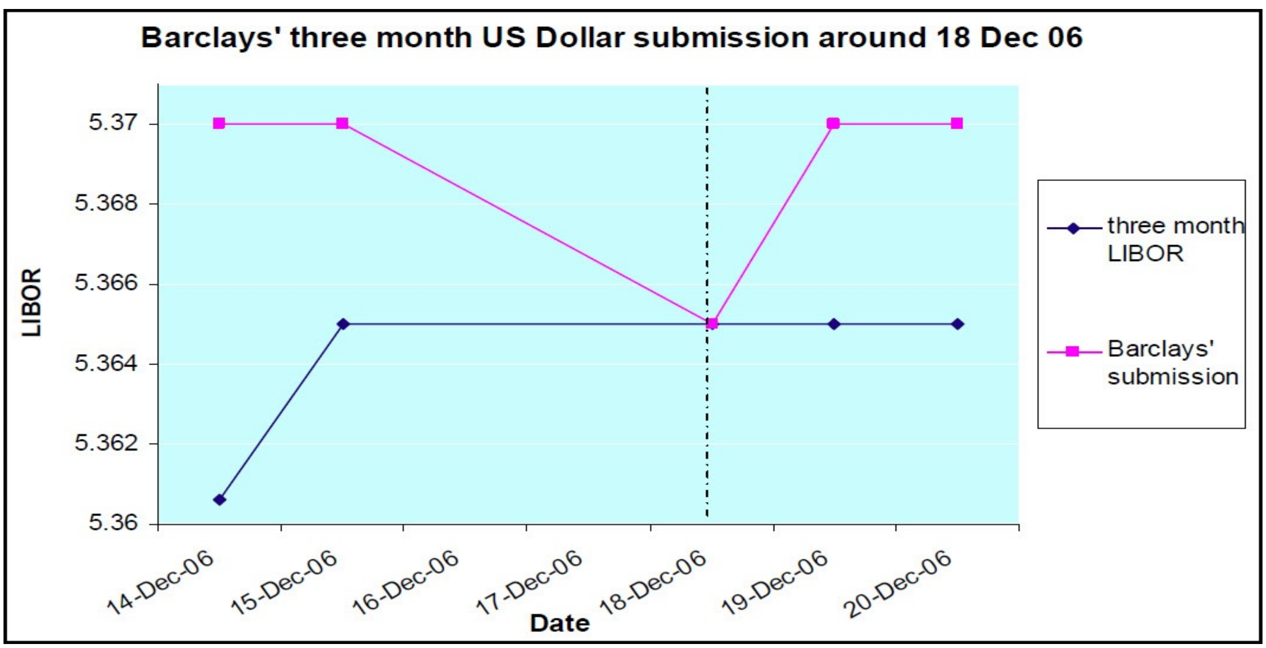
Trader F: ***"Pls set 3m libor as high as possible today"***

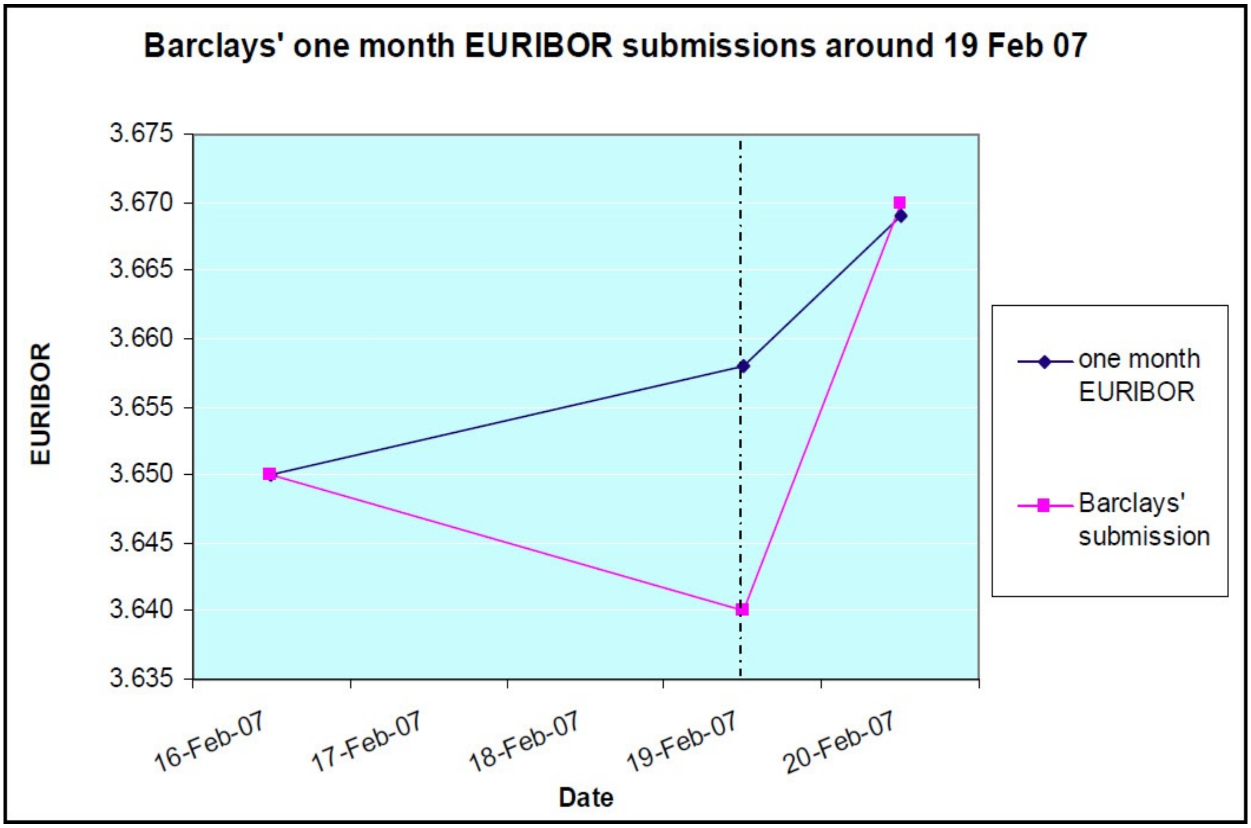
Submitter: ***"Sure 5.37 okay?"***

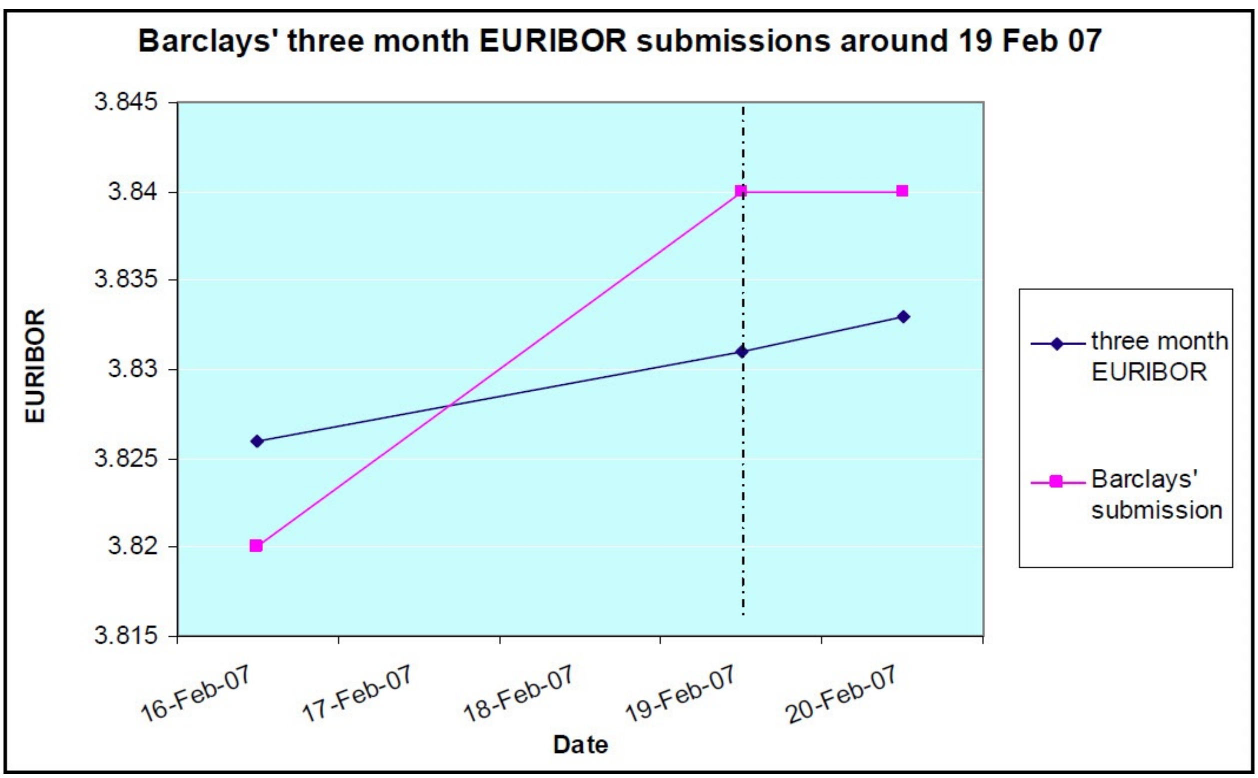
Trader F: ***"5.36 is fine"***

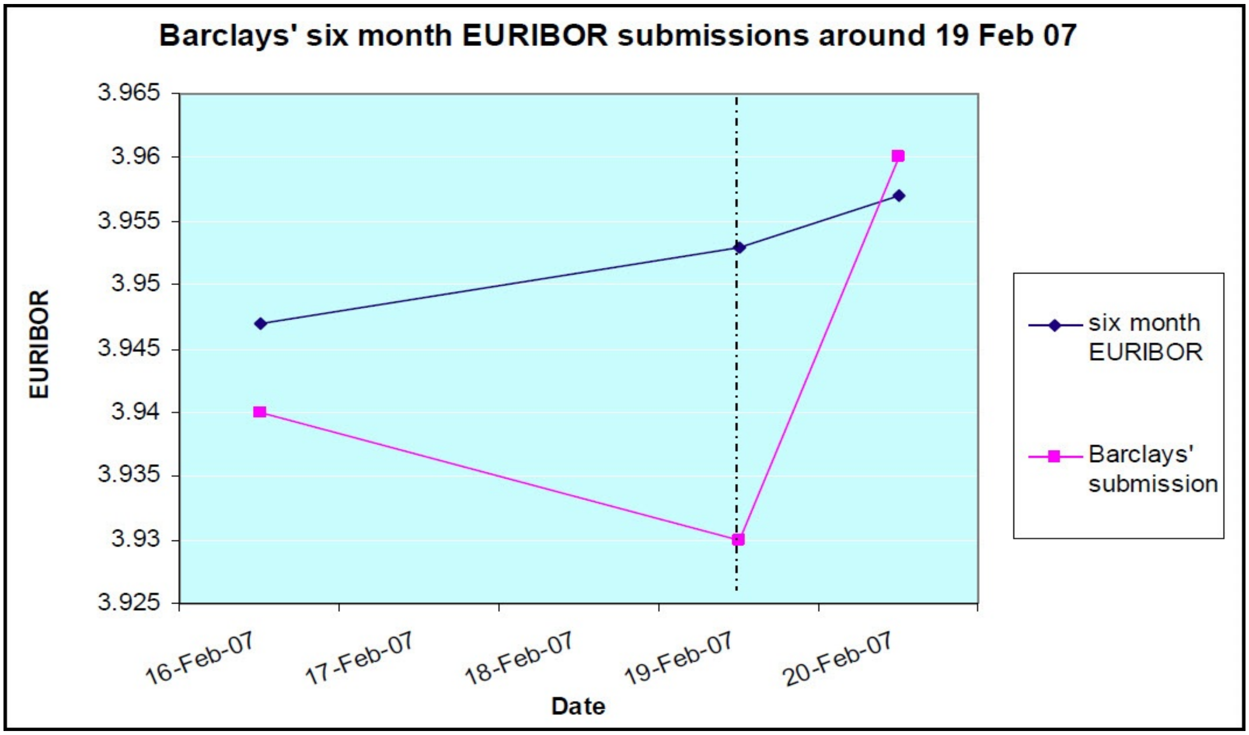
247. The FSA Final Notice illustrates through a series of graphs how Barclays' U.S. Dollar LIBOR submissions were relative to the final LIBOR benchmark rate. When compared with dates when there were known requests and efforts to manipulate LIBOR, Barclays' U.S. Dollar submissions demonstrate the existence and scope of the conspiracy.






Barclays' one month EURIBOR submissions around 19 Feb 07
EURIBOR
3.675
3.670
3.665
3.660
3.655
3.650
3.645
3.640
3.635
16-Feb-07
17-Feb-07
18-Feb-07
19-Feb-07
20-Feb-07
Date
one month EURIBOR
Barclays' submission


Barclays' three month EURIBOR submissions around 19 Feb 07
EURIBOR
3.845
3.84
3.835
3.83
3.825
3.82
3.815
16-Feb-07
17-Feb-07
18-Feb-07
19-Feb-07
20-Feb-07
Date
three month EURIBOR
Barclays' submission



3. UBS Settles Criminal and Civil Claims In Exchange for Cooperating with Prosecutors and Regulatory Authorities in the United Kingdom, United States, and Switzerland

248. On December 19, 2012, Defendant UBS announced a settlement with regulators in the U.K., U.S., and Switzerland, under which UBS would pay over $1.5 billion. As part of the settlement, subsidiary UBS Securities Japan Co. Ltd. entered into a Plea Agreement, under which it pled guilty to felony wire fraud and agreed to pay a $100 million fine to the U.S. DOJ's Fraud Section. A copy of the Plea Agreement is attached hereto as **Exhibit 2**. Additionally, Defendant UBS AG agreed to pay a $400 million penalty to the U.S. DOJ's Fraud Section as part of a Non-Prosecution Agreement. Under the Non-Prosecution Agreement, UBS also agreed to admit to a 51-page Statement of Facts, setting forth in great detail its manipulation of LIBOR and other similar benchmark rates. UBS agreed to pay another $700 million to the U.S. CFTC, $259.2 million to the U.K. FSA, and $64.3 million to the Swiss Financial Markets Authority.

249. As with the Barclays settlement, when the UBS settlement was announced, the CFTC and other regulators disclosed the contents of dozens of communications evidencing the misconduct of UBS' traders and Submitters, and their cooperation with employees of other banks and brokerage firms to make false submissions to favor UBS' trading positions vis-à-vis their transactional counterparties and other investors in LIBOR-based financial instruments, such as Plaintiff. The following are examples of internal UBS emails, as well as emails between UBS traders and third party brokers and traders employed by other banks, taken from the CFTC's December 19, 2012 *Order Instituting Proceedings:*

December 24, 2008:

- UBS Yen Trader: "Can we pls go for lower Libors tonight, across all tenors (1 m 3m and 6m) much appreciated"
- UBS Yen Trader-Submitter: "Will do"

November 8, 2006:

- UBS Senior Yen Trader: "have put some pressure on a few people I know to get libors up today, mainly 6pm as I am paid that one, let me know if that doesn't suit or if there are any particularly you need up..."

February 27, 2007:

- UBS Senior Yen Trader: "hi... can we go low 1m and 3m again pls"
- UBS Senior Yen Trader-Submitter: "we'll try...but there's a limit on to how much [w]e can shade it i.e. we still have to be within an explainable range"

April 20, 2007:

- UBS Senior Yen Trader: "I know I only talk to you when I need something but if you could ask your guys to keep 3m low wd be massive help as long as it doesn't interfere with your stuff tx in advance ... mate did you manage to spk to your cash boys?"
- Yen trader at "Bank B": "yes u owe me they are going 65 and 71"
- UBS Senior Yen Trader: "thx mate yes I do in fact I owe you big time mater they set 64! thats beyond the call of duty!"

November 1, 2007:

- UBS Senior Yen Trader: "hello mate, real big favour to ask. could you try for low 6m fix today pls wld be most appreciated. Thx mate"
- Yen trader at "Bank B": "will try my best due hows u ??"

July 7, 2008:

- UBS Senior Yen Rates Trader: "1m libor is causing me a real headache .. I need it to start coming lower"
- Derivatives Broker [at unidentified brokerage firm]: "yeah I know mate ... ill try and push a few fictitious offers ard this mng see if tahts helps"

September 18, 2008:

- UBS Senior Yen Trader [to Derivatives Broker at unidentified brokerage firm]: "... I need you to keep it as low as possible... I'll pay you, you know, 50,000 dollars, 100,000 dollars ... whatever you want... I'm a man of my word."

4. The First Individuals Face Criminal Charges And Arrests

250. On December 11, 2012, the U.K. Serious Fraud Office arrested three individuals as part of its criminal investigation. The individuals arrested were Tom Alexander William Hayes, who had worked as a trader for Defendants UBS and Citigroup, and Terry Farr and Jim Gilmour, both employees of brokerage firm RP Martin Holdings Ltd.

251. On December 19, 2012, the same day that UBS announced its settlement with regulators, the U.S. DOJ's criminal complaint against former senior UBS traders Tom Alexander William Hayes and Roger Darin was unsealed in the Southern District of New York. Hayes and Darin were charged with conspiracy to commit wire fraud. Hayes, who was arrested by the U.K. Serious Fraud Office the previous week, was also charged with wire fraud and a price fixing violation. The complaint alleges that Hayes and Darin conspired with others inside UBS, as well as brokerage firms and other banks, to manipulate

Yen-LIBOR to benefit UBS' trading positions vis-à-vis their transactional counterparties and other investors in LIBOR-based financial instruments, such as Plaintiff.

5. The Royal Bank of Scotland Refuses to Comply with Order to Produce Documents on Its Involvement in the Global LIBOR Manipulation Conspiracy

252. Until recently, The Royal Bank of Scotland ("RBS") had been fighting a court order requiring it to cooperate with the LIBOR investigation into allegations its traders manipulated LIBOR rates. A senior Canadian judge ordered RBS and several other financial institutions to hand over evidence to investigators from the Canadian Competition Bureau. The others that are known targets of the investigation by the Canadian Competition Bureau are Citigroup, Deutsche Bank, HSBC, JPMorgan and UBS.

253. According to court papers, a senior RBS executive who works closely with Canadian regulators was aware of the rate-fixing scandal five years ago. According to a trader who was fired for LIBOR rate manipulation, Scott Nygaard, RBS's head of treasury markets and advisor to the Bank of England, knew about the request to manipulate inter-bank borrowing rates. Tan Chi Min, former head of RBS delta trading in Singapore, alleged that senior managers "condoned collusion" between their traders to rig the financial markets and maximize profits. Tan, who was fired for gross misconduct in 2011, filed a lawsuit claiming almost £1 million in bonuses and £3.3 million in RBS shares. The suit names five traders he claims made requests for the LIBOR rate to be altered and three senior managers whom he alleges knew what was going on in 2007. According to Tan, manipulating the LIBOR rate was so ingrained at RBS that rate-setters and traders were "specifically seated together" in the London office to "facilitate the sharing of information."

6. The Royal Bank of Scotland Settles Criminal and Civil Claims In Exchange for Cooperating with Prosecutors and Regulatory Authorities in the United Kingdom and the United States

254. On February 6, 2013 Defendant RBS announced a settlement with regulators in the U.K., and U.S., under which RBS would pay approximately $612 million. As part of the settlement, subsidiary RBS Securities Japan Limited entered into a Plea Agreement, under which it pled guilty to felony wire fraud and agreed to pay a $50 million fine to the U.S. DOJ's Fraud Section. A copy of the Plea Agreement is attached hereto as **Exhibit 3**. Additionally, subsidiary Royal Bank of Scotland plc agreed to pay a $100 million penalty to the U.S. DOJ's Fraud Section as part of a Deferred Prosecution Agreement. Under the Deferred Prosecution Agreement, RBS also agreed to admit to an 11-page Statement of Facts, setting forth in great detail its manipulation of LIBOR and other similar benchmark rates. RBS agreed to pay another $325 million to the U.S. CFTC, and approximately $137 million to the U.K. FSA.

255. When the RBS settlement was announced, the CFTC and other regulators disclosed the contents of dozens of communications evidencing the misconduct of RBS' traders and submitters, their cooperation with employees of other banks and brokerage firms to make false submissions to favor RBS' trading positions vis-à-vis their transactional counterparties and other investors in LIBOR-based financial instruments, such as Plaintiff, and knowledge of other banks' wrongdoing. The following are examples of internal RBS emails, as well as emails between RBS traders and traders employed by other banks, taken from the CFTC's February 6, 2013 *Order Instituting Proceedings:*

May 3, 2007:

- Senior Yen Trader: "can you drop a note to [Primary Submitter] to set low 1m and low 3m JPY libor today please? Thanks"

- Yen Trader 5: "just gave him a shout, said already on it..."
- Senior Yen Trader: "thanks"
- Yen Trader 5: "no probs"

December 3, 2007:

- Yen Manager: "for choice we want lower libors.. Let the [Money Market] guys know pls"
- Yen Trader 2: "sure I am setting today as [Yen Trader 1] and cash guy off [Primary Submitter]"
- Yen Manager: great set it nice and low"
- Yen Trader 2: "1.02 in 6m or lower"
- Yen Manager: "yeh lower"
- Yen Trader 2: "1.01 then cant really go much lower than that"
- Yen Manager: "ok"

August 20, 2007:

- Senior Yen Trader: "this libor setting is getting nutss..."
- Bank B Trader: "[UBS] is lending dolls through my currencies in 3 month do u see him doing the same in urs..."
- Senior Yen Trader: "yes, he always led usd in my mkt[,] the jpy libor is a cartel now... its just amazing how libor fixing can make you that much money"

August 20, 2007:

- Yen Trader 1: "where would you like it[,] libor that is[,] same as yesterday is call"
- Yen Trader 4: "haha, glad you clarified ! mixed feelings but mostly I'd like it all lower so the world starts to make a little more sense."
- Senior Yen Trader: "the whole HF [hedge fund] world will be kissing you instead of calling me if libor move lower"

February 15, 2007:

- RBS Yen Trader 2: "how many people can u get to put this 1m libor low"
- UBS Yen Trader: well us[,] [Bank E,] and a few others I think"

June 26, 2009:

- Interdealer Broker B: "Hello mate, [Yen Trader 1]? You all set?"
- RBS Yen Trader 1: "Yeah."
- Interdealer Broker B: "Right listen we've had a couple of words with them, you want them lower right?"
- RBS Yen Trader 1: "Yeah."
- Interdealer Broker B: "Alright okay, alright listen, we've had a couple words with them. You want them lower, right?"
- RBS Yen Trader 1: "Yeah."
- Interdealer Broker B: "Alright okay, alright, no we're okay just confirming it. We've, so far we've spoke to [Bank F]. We've spoke to a couple of people so we'll see where they come in alright. We've spoke, basically one second, basically we spoke to [Bank F], [Bank G], [Bank H], who else did I speak to? [Bank I]. There's a couple of other people that the boys have spoke to but as a team we've basically said we want a bit lower so we'll see where they come in alright?"

7. <u>Evidence Disclosed to Date in Canada and Singapore Confirms that Certain Defendants Conspired to Manipulate Yen-LIBOR</u>

256. Documents submitted in pending legal proceedings in Canada and Singapore strongly indicate some Defendants manipulated Yen-LIBOR, the Yen-based rate set by a 15 member BBA panel that, during the Relevant Period consisted of (and still consists of) many of the same banks whose borrowing-cost quotes determine USD-LIBOR, including Barclays, Citibank, Deutsche Bank, HSBC, JPMorgan Chase, Lloyds, RBS, and UBS. The facts (some provided by Defendants themselves) demonstrating Defendants' misconduct with respect to Yen-LIBOR illustrate both their desire and ability to manipulate interest rates, and the method by which they have done so.

a. <u>Canadian Investigation</u>

257. In the Canadian action, Brian Elliott, a Competition Law Officer in the Criminal Matters Branch of the Competition Bureau, submitted an affidavit in May 2011 (the "May 2011 Elliott Affidavit") in support of "an Ex Parte

Application for Orders to Produce Records Pursuant to Section 11 of the Competition Act and for Sealing Orders" in the Court of Ontario, Superior Court of Justice, East Region. Specifically, the May 2011 Elliott Affidavit sought orders requiring HSBC Bank Canada, Royal Bank of Scotland N.V., Canada Branch, Deutsche Bank, J.P. Morgan Bank Canada, and Citibank Canada (referenced collectively in the Affidavit as the "Participant Banks") to produce documents in connection with an inquiry concerning whether those banks conspired to "enhance unreasonably the price of interest rate derivatives from 2007 to March 11, 2010; to prevent or lessen, unduly, competition in the purchase, sale or supply of interest derivatives from 2007 to March 11, 2010; to restrain or injure competition unduly from 2007 to March 11, 2010; and to fix, maintain, increase or control the price for the supply of interest rate derivatives from March 12, 2010 to June 25, 2010."

258. The May 2011 Elliott Affidavit further states the Competition Bureau "became aware of this matter" after one of the banks (referenced in the affidavit as the "Cooperating Party") "approached the Bureau pursuant to the Immunity Program" and, in connection with that bank's application for immunity, its counsel "orally proffered information on the Alleged Offences" to officers of the Competition Bureau on numerous occasions in April and May 2011. Furthermore, according to the Affidavit, counsel for the Cooperating Party "stated that they have conducted an internal investigation of the Cooperating Party that included interviews of employees of the Cooperating Party who had knowledge of or participated in the conduct in question, as well as a review of relevant internal documents." The Affidavit also notes that on May 17, 2011, counsel for the Cooperating Party provided the Competition Bureau with "electronic records," which Elliot "believe[s] to be records of some of the communications involving the Cooperating Party that were read out as part of the orally proffered information by counsel for the Cooperating Party."

259. The Affidavit recounted that, according to counsel, the Cooperating Party "entered into agreements to submit artificially high or artificially low [LIBOR] submissions in order to impact the Yen LIBOR interest rates published by the [BBA]." Those entities engaged in that misconduct to "adjust[] the prices of financial instruments that use Yen LIBOR rates as a basis." The Affidavit further states the Cooperating Party's counsel "indicated the Participant Banks submitted rates consistent with the agreements and were able to move Yen LIBOR rates to the overall net benefit of the Participants." The Participant Banks were BBA member banks who were responsible for providing quotes for that particular LIBOR rate which were used by BBA and Thomson Reuters to calculate LIBOR.

260. More specifically, counsel proffered that during the relevant period, the Participant Banks "communicated with each other and through the Cash Brokers to form agreements to fix the setting of Yen LIBOR," which "was done for the purpose of benefitting trading positions, held by the Participant Banks, on IRDs [interest rate derivatives]." By manipulating Yen LIBOR, the Affidavit continues, "the Participant Banks affected all IRDs that use Yen LIBOR as a basis for their price." The misconduct was carried out "through e-mails and Bloomberg instant messages between IRD traders at the Participant Banks and employees of Cash Brokers (who had influence in the setting of Yen LIBOR rates)." The Affidavit details:

> IRD traders at the Participant Banks communicated with each other their desire to see a higher or lower Yen LIBOR to aid their trading position(s). These requests for changes in Yen LIBOR were often initiated by one trader and subsequently acknowledged by the trader to whom the communication was sent. The information provided by counsel for the Cooperating Party showed that the traders at Participant Banks would indicate their intention to, or that they had already done so, communicate internally to their colleagues who were involved in submitting rates for Yen LIBOR. The traders would then communicate to each other confirming that the agreed up rates were submitted. Cash Brokers were an instrumental part of the conspiracy described by the Affidavit.

> The Cash Brokers were asked by IRD traders at the Participant Banks to use their influence with Yen LIBOR submitters to affect what rates were submitted by other Yen LIBOR panel banks, including the Participant Banks.

261. The Affidavit indicates the Cooperating Party's counsel further proffered that at least one of the Cooperating Party's IRD traders ("Trader A" or "Trader B") communicated with an IRD trader at HSBC, Deutsche Bank, RBS, JPMorgan (two traders), and Citibank. In that regard, the Affidavit specifies:

> Trader A communicated his trading positions, his desire for a certain movement in Yen LIBOR and instructions for the HSBC trader to get HSBC to make Yen LIBOR submissions consistent with his wishes. Attempts through the HSBC trader to influence Yen LIBOR were not always successful. Trader A also communicated his desire for a certain movement in the Yen LIBOR rate with the Cash Brokers. He instructed them to influence the Yen LIBOR submitters of HSBC. The Cash Brokers acknowledged making these attempts.
>
> Trader A communicated his trading positions, his desire for certain movement in Yen LIBOR and asked for the Deutsche IRD trader's assistance to get Deutsche to make Yen LIBOR submissions consistent with his wishes. The Deutsche IRD trader also shared his trading positions with Trader A. The Deutsche IRD trader acknowledged these requests. Trader A also aligned his trading positions with the Deutsche IRD trader to align their interests in respect of Yen LIBOR. The Deutsche IRD trader communicated with Trader A considerably during the period of time, mentioned previously, when Trader A told a Cash Broker of a plan involving the Cooperating Party, HSBC and Deutsche to change Yen LIBOR in a staggered and coordinated fashion by the Cooperating Party, HSBC and Deutsche. Not all attempts to change the LIBOR rate were successful.
>
> Trader A explained to RBS IRD trader who his collusive contacts were and how he had and was going to manipulate Yen LIBOR. Trader A also communicated his trading positions, his desire for certain movement in Yen LIBOR and gave instructions for the RBS IRD trader to get RBS to make Yen LIBOR submissions consistent with Trader A's wishes. The RBS IRD trader acknowledged these communications and confirmed that he would follow through. Trader A and the RBS IRD trader also entered into transactions that aligned their trading interest in regards to Yen LIBOR. Trader A also communicated to another RBS IRD trader his trading positions, his desire for a certain movement in Yen LIBOR and instructions to get RBS to make Yen LIBOR submissions consistent with his wishes. The second RBS IRD trader agreed to do this.
>
> Trader A communicated his trading positions, his desire for a certain movement in Yen LIBOR and gave instructions for them [two JPMorgan IRD traders] to get JPMorgan to make Yen LIBOR submissions consistent with his wishes. Trader A also asked if the

> IRD traders at JPMorgan required certain Yen LIBOR submissions to aid their trading positions. The JPMorgan IRD traders acknowledged these requests and said that they would act on them. On another occasion, one of the JPMorgan IRD traders asked Trader A for a certain Yen LIBOR submission, which Trader A agreed to help with. Trader A admitted to an IRD trader at RBS that he colluded with IRD traders at JPMorgan.
>
> Trader B of the Cooperating Party communicated with an IRD trader at Citi. They discussed their trading positions, advanced knowledge of Yen LIBOR submissions by their banks and others, and aligned their trading positions. They also acknowledged efforts to get their banks to submit the rates they wanted.

262. On <u>May 18, 2011</u>, the Ontario Superior Court signed the orders directing the production of the records sought by the May 2011 Elliott Affidavit.

263. Elliott submitted another affidavit in June 2011 (the "June 2011 Elliot Affidavit"), which sought an order requiring ICAP Capital Markets (Canada) Inc., believed to be one of the "Cash Brokers" referenced in the May 2011 Elliott Affidavit, to "produce records in the possession of its affiliates, ICAP PLC and ICAP New Zealand Ltd." The June 2011 Elliott Affidavit primarily detailed communications between "Trader A" (an IRD trader) of the previously-referenced "Cooperating Party" and an ICAP broker (referenced in the June 2011 Elliott Affidavit as "Broker X") during the Relevant Period.

264. The Affidavit specifies that Trader A "discussed his current trading positions with Broker X and where he would like to see various maturities of Yen LIBOR move." Trader A "asked Broker X for Yen LIBOR submissions that were advantageous to Trader A's trading positions," and Broker X, in turn, "acknowledged these requests and advised Trader A about his efforts to make them happen." The Affidavit further states:

> Counsel for the Cooperating Party has proffered that the expectation was for Broker X, directly or through other brokers at ICAP, to influence the Yen LIBOR submissions of Panel Banks. Broker X communicated to Trader A his efforts to get brokers at ICAP in London to influence Yen LIBOR Panel Banks in line with Trader A's requests. The efforts of Broker X included contacting a broker at ICAP in London who issued daily LIBOR expectations to the market. Trader A also communicated to Broker X his dealings with traders at other Participant Banks and a broker at another Cash Broker. Not all

efforts to influence Yen LIBOR panel banks were successful. Broker X had additional discussions around the setting of Yen LIBOR with another trader of the Cooperating Party ("Trader B").

265. On June 14, 2011, the Ontario Superior Court issued an order allowing the document requests concerning ICAP.

266. According to press reports, UBS was the "Cooperating Party" referred to in the Elliott Affidavits.

b. Singaporean Legal Action

267. In addition to UBS's admissions in the Canadian proceedings of the existence of a LIBOR manipulation conspiracy and its involvement in that conspiracy, in a pending legal action in Singapore's High Court, Tan Chi Min, former head of delta trading for RBS's global banking and markets division in Singapore (who worked for RBS from August 12, 2006 to November 9, 2011), alleges in his Writ of Summons and Statement of Claim that the bank permitted collusion between its traders and LIBOR rate-setters to set LIBOR at levels to maximize profits. In the same filing, Min stated RBS commenced an internal probe following inquiries by European and U.S. authorities about potential LIBOR manipulation.

268. Min - whom RBS later terminated based on allegations that Min had engaged in 'gross misconduct" - revealed that RBS's internal investigations "were intended to create the impression that such conduct was the conduct not of the defendant itself but the conduct of specific employees who the defendant has sought to make scapegoats through summary dismissals." Defendant RBS, like many of the other Defendants in this case, have sought to minimize their own responsibility by scapegoating their own executives, traders and employees were either directly or indirectly urged to engage in LIBOR manipulation.

269. Min further alleges that it was "part of his responsibilities to provide input and submit requests to the rate setter and there is no regulation, policy, guideline or law that he has infringed in doing this," and that "it was common

practice among [RBS]'s senior employees to make requests to [RBS]'s rate setters as to the appropriate LIBOR rate." Those requests, Min specified, "were made by, among others, Neil Danziger, Jezri Mohideen (a senior manager), Robert Brennan (a senior manager), Kevin Liddy (a senior manager) and Jeremy Martin," and the practice "was known to other members of [RBS]'s senior management including Scott Nygaard, Todd Morakis and Lee Knight." Min added that RBS employees "also took requests from clients (such as Brevan Howard) in relation to the fixing of LIBOR."

270. In responding to Min's allegations, RBS admitted that Min had tried to improperly influence RBS rate-setters from 2007 to 2011 to submit LIBOR rates at levels that would benefit him and his trading positions while at RBS.

271. According to Min, who has admitted to manipulating LIBOR, he could not have influenced the rate on his own. Min disclosed that it was "common practice" among RBS's senior employees to make requests as to the appropriate LIBOR rate.

I. Independent Analyses By Consulting Experts Indicate Defendants Artificially Suppressed LIBOR

272. Consulting experts engaged to investigate the LIBOR rate manipulation in the coordinated proceedings in the Southern District of New York have measured LIBOR against other recognized global interest rate benchmarks for determining the true borrowing costs of financial institutions, such as the Defendants here. Employing well-respected statistical and analytical methodologies that are accepted within the statistical, analytical and economic fields, these consultants have provided analyses indicating Defendants artificially suppressed LIBOR during the Relevant Period, as LIBOR did not appropriately correspond with other measures of Defendants' borrowing costs. This demonstrates that LIBOR was manipulated since it did not truthfully reflect the true cost of borrowing amongst financial institutions as it was intended to do.

Specifically, the consulting experts have observed (I) the difference between Defendants' respective LIBOR quotes and their probabilities of default (which measure the banks' respective levels of credit risk); and (ii) the spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate. Those analyses, considered collectively, strongly indicate Defendants suppressed LIBOR throughout the Relevant Period.

273. Assessing the likelihood that LIBOR was suppressed during the Relevant Period, expert consultants hired by other plaintiffs compared USD-LIBOR panel members' quotes from 2007 through 2008 to the daily default probability estimates for each of those banks - as determined, and updated daily for each maturity (term), by Kamakura Risk Information Services ("KRIS"). The study focused on identifying any periods of severe discrepancy between each bank's probabilities of default ("PDs") and the LIBOR quotes the bank submitted to the BBA.

274. The KRIS reduced-form model estimates each bank's default risk on a daily basis by analyzing each bank's equity and bond prices, accounting information, and general economic conditions, such as the level of interest rates, unemployment rates, and inflation rates, amongst other data points. This data is based on objective and observable data regarding each of the financial institution Defendants and not on "self-reported" figures that are subject to manipulation, which is what happened to LIBOR. On its website, KRIS states it "provides a full term structure of default for both corporate and sovereign credit names based upon a multiple models approach" and its default probabilities "are updated daily and cover more than 29,000 companies in 36 countries." This data is a third party evaluation of a bank's default risk based on actual data and when there is a severe discrepancy between the objective evaluation of a bank's credit risk and the credit risk reflected in "self-reported" LIBOR numbers, that is strong evidence that the LIBOR numbers being reported by the Defendants are false and misleading.

275. Probability of Default, which KRIS' data analysis calculates, provides a measure of a bank's credit (default) risk exposure, essentially the likelihood that the bank will default within a specified time period. PD can be estimated using statistical models, whereas LIBOR is a rate of return required by investors lending short-term to a bank. Since Defendants WestLB, Rabobank and Norinchukin are not publically traded and therefore have less publically available data, the PD analysis did not include those three banks. However, all three of these Defendants are under investigation by government authorities and there is evidence suggesting that all three were involved in this conspiracy. A finding of a statistically significant negative correlation coefficient between daily LIBOR quotes and PDs for a given bank over a given term period is a strong indication that LIBOR rates are being manipulated. This indicates that unless all of the financial institution Defendants are badly misjudging the risk of default of other financial institutions and are being underpaid for that misjudgment, they were colluding to create the illusion that their risk of default were much lower than they were. A basic principle of finance and common sense is that higher rates of return are required for taking on additional risk. This results in a positive relationship (correlation) between risk and return. The Defendants in this case, by colluding to hide the true risk of borrowing from the Defendants, underpaid investors such as Plaintiff who were accepting far more risk and not being appropriately compensated for that risk.

276. When there is a finding of a statistically significant negative coefficient (of any size) between a bank's daily LIBOR quotes and its PD, this means that the banks are making the misrepresentation to the public that they are taking on greater risk and receiving less interest payments for that risk. This violates fundamental finance theory and means that either the banks were agreeing to take on more risk for less money (which is impossible) or that they were colluding to manipulate interest rates for their own benefit (which is highly likely).

This is strong evidence that the Defendants were fraudulently and artificially suppressing their LIBOR quotes in order to boost their own profits illegally as well as deceiving the public about their true probability of default. In an honest market, high interest rates as well as sudden interest rate sparks are a signal to the market that there are financial problems which warrant further investigation. When banks conspire, they can hide those signals, keeping investors, such as Plaintiff, operating in the dark and accepting lower interest rates and therefore, lower rates of returns, for their constituents and beneficiaries. As part of this analysis, any finding of negative, statistically significant correlation coefficients between a bank's PDs and its LIBOR quotes suggests LIBOR suppression by the bank over the period of analysis.

277. The magnitude of the correlation coefficient is impacted by the volatility of both PD and LIBOR for each bank during the time period. Thus, for example, if a bank has high volatility in its PDs, the absolute value of the correlation coefficient will tend to be lower (*i.e.*, less negative) as compared to an identical bank with low PD volatility. However, both may be equally engaged in LIBOR suppression if their correlation coefficients are statistically significant and negative.

278. Using the KRIS data, consulting experts for other plaintiffs tested to determine the correlation between each bank's daily sealed LIBOR quotes and the bank's estimated PD that day for the same maturity term. As a result of that study, which was for the 2007-2008 time period, those consulting experts determined that there was artificial LIBOR suppression in that time frame for the one-month, three-month, six-month and twelve-month LIBOR.

279. The LIBOR quotes for all the reporting banks (except HSBC) during 2007 were negatively correlated with their daily updated PDs (for the same maturity term) to a statistically significant degree. For example, the correlation between Bank of America's daily LIBOR quotes and its daily PDs was negative

and statistically significant at a very high level for the one-month, three-month, six-month and 12-month terms, i.e., between -0.5857 and -0.6093.15. This analysis shows that while the probability of default for the Defendants was increasing, the LIBOR quotes were going down. This happened over a one year period and was consistent, to varying degrees, amongst numerous Defendants. While a single moment of negative correlation may be the result of a statistical anomaly, the fact that the LIBOR quotes were consistently negatively correlated with their probability of default over a long period of time and across multiple Defendants, is strong evidence of a conspiracy.

280. Performing the same analysis with respect to the LIBOR panel banks' daily LIBOR quotes and PDs during 2008, the expert consultants found that for all of the banks, the submitted LIBOR quotes were negatively correlated with their PDs at the one-month and three-month maturities. Indeed, all of the banks were submitting unduly low LIBOR quotes at all maturities during the time period from August 9, 2007 until September 12, 2008. There was only one exception, from September 15, 2008 through December 31, 2008, when this was not true. This period is immediately after the Lehman bankruptcy. The Lehman bankruptcy, because of the suddenness and size of the bankruptcy, had a significant impact on the risk evaluations of all financial institutions.

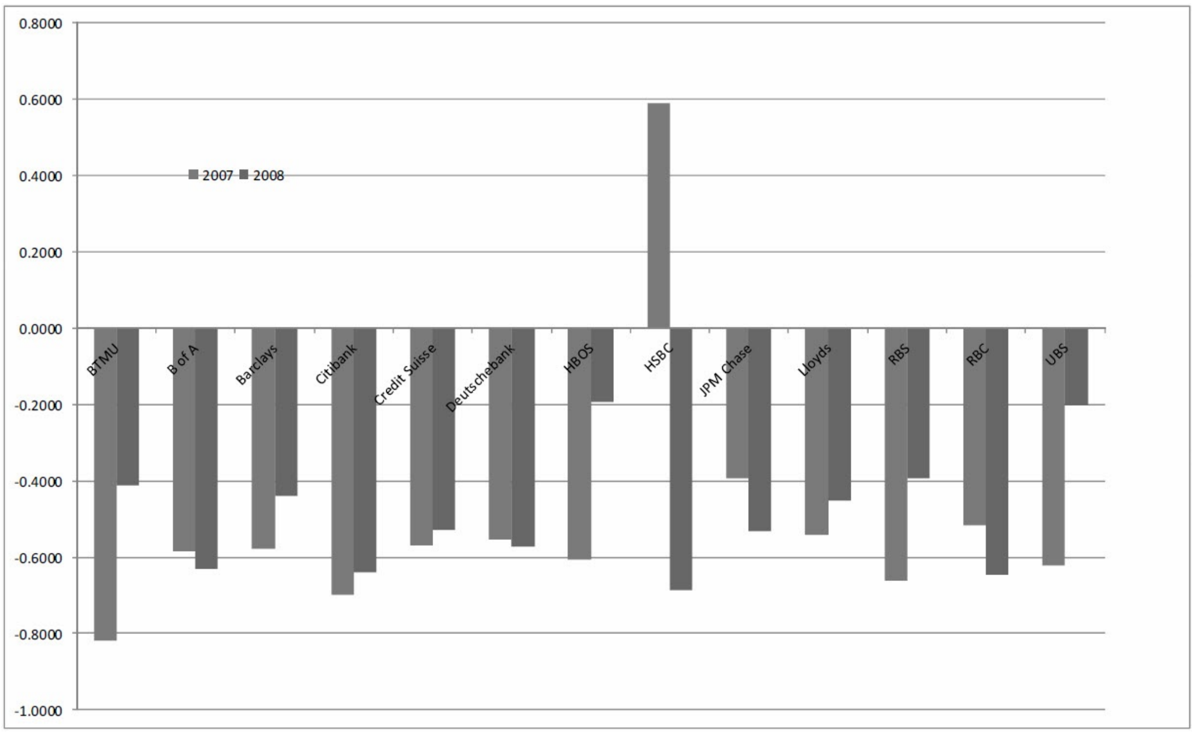
281. The following graphs illustrate the findings of this expert analysis - which demonstrates a striking negative correlation between USD-LIBOR panel banks' LIBOR quotes and PDs during 2007 and 2008. This indicates that the LIBOR quotes from the Defendants were all being artificially suppressed. The documentary and testimonial evidence uncovered demonstrates that this statistical finding is best explained as the result of intentional wrongdoing and manipulation by the Defendants.

Graph 1

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

One-Month Term



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

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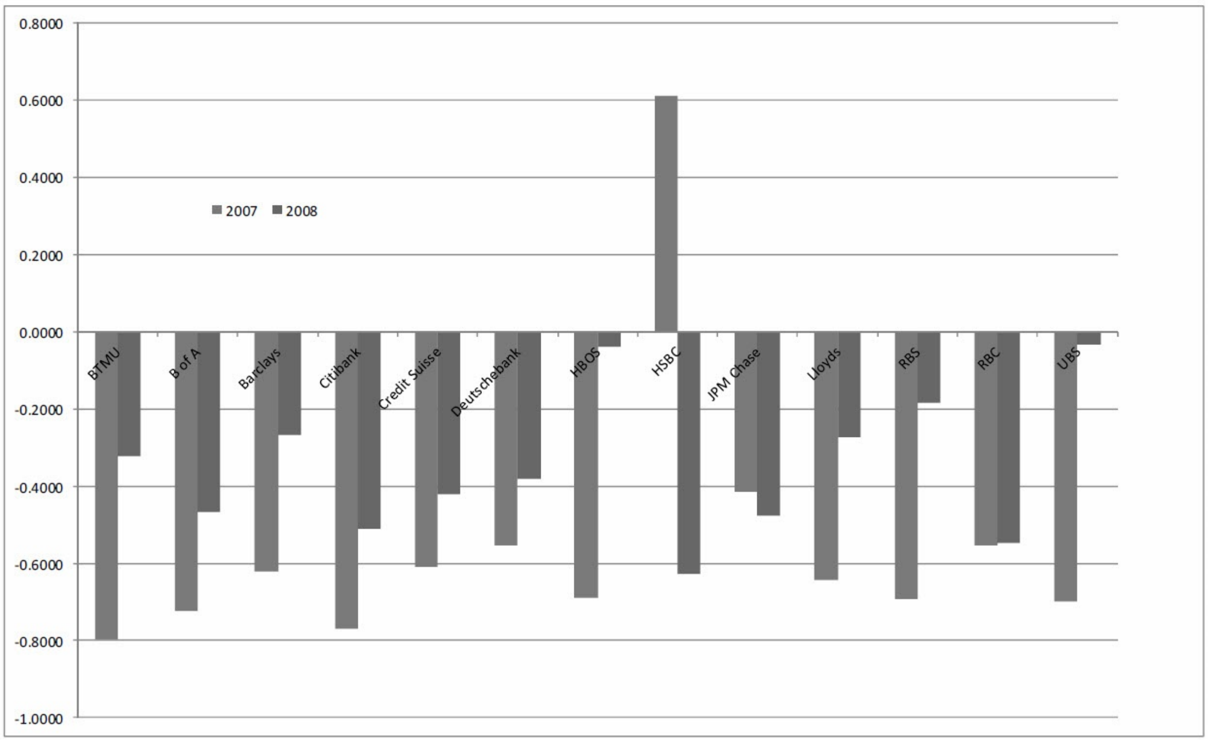
Graph 2

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

Three-Month Term



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

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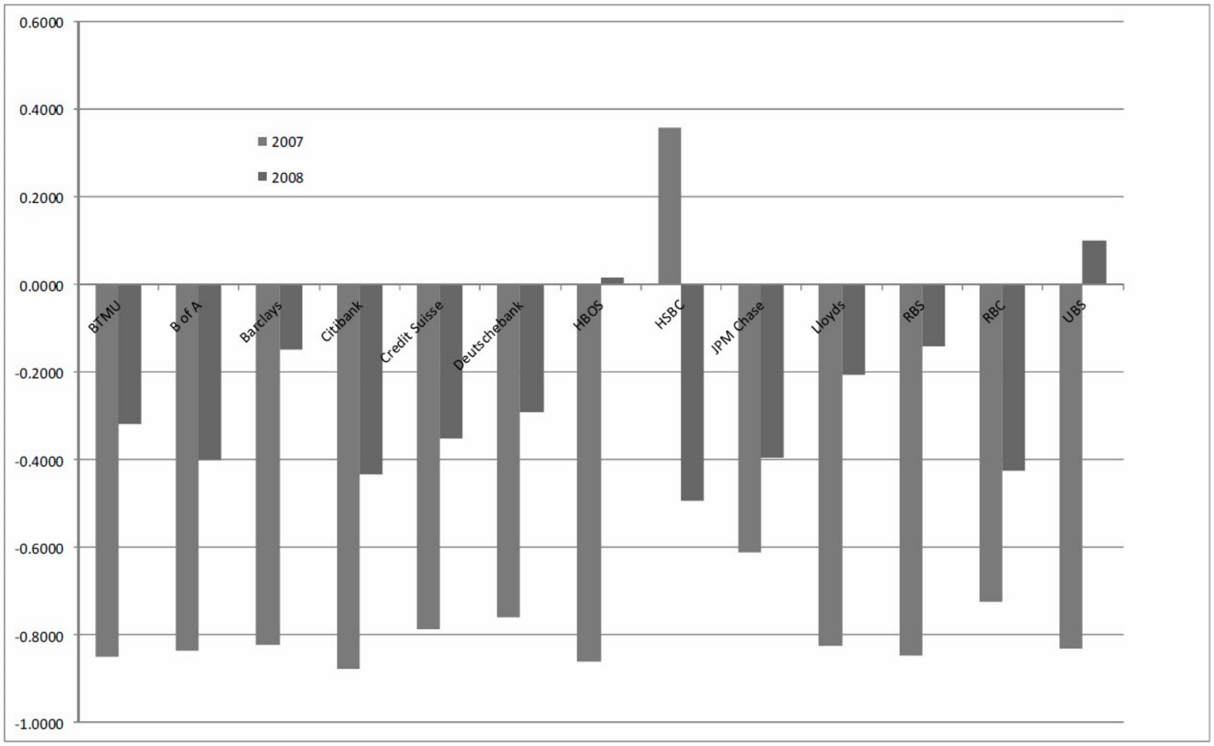
Graph 3

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

Six-Month Term



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

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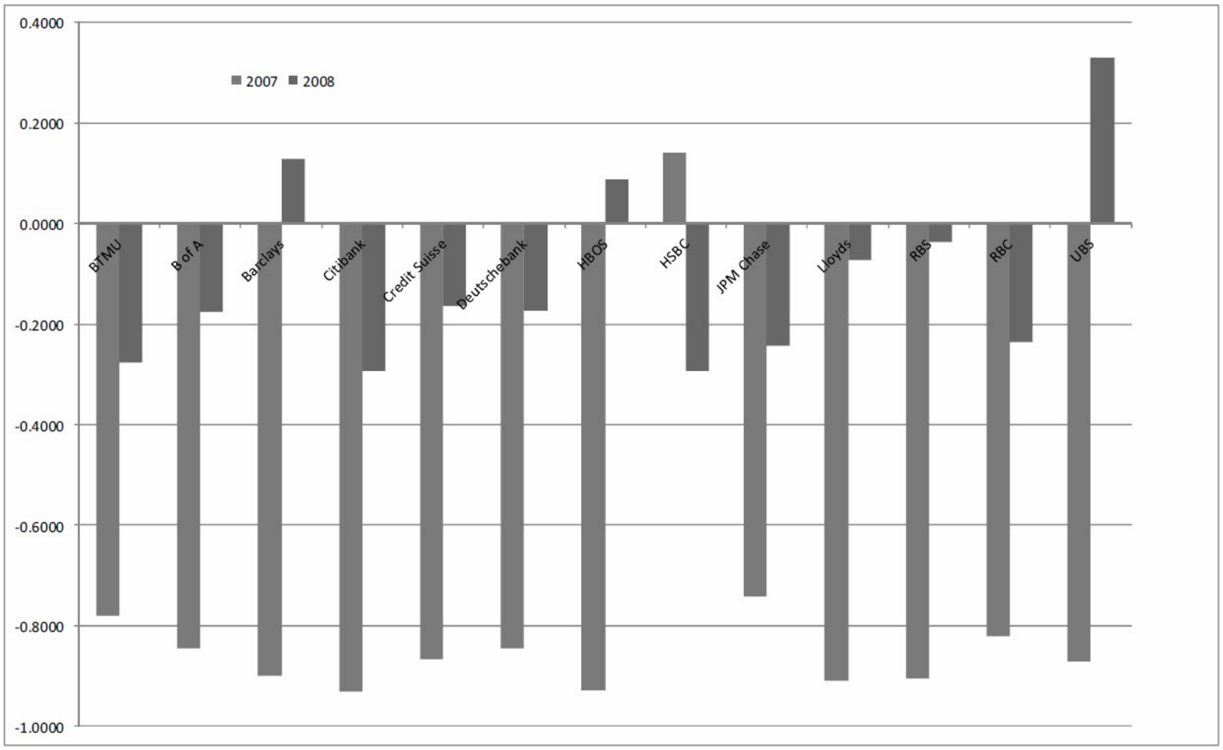
Graph 4

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

Twelve-Month Term



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

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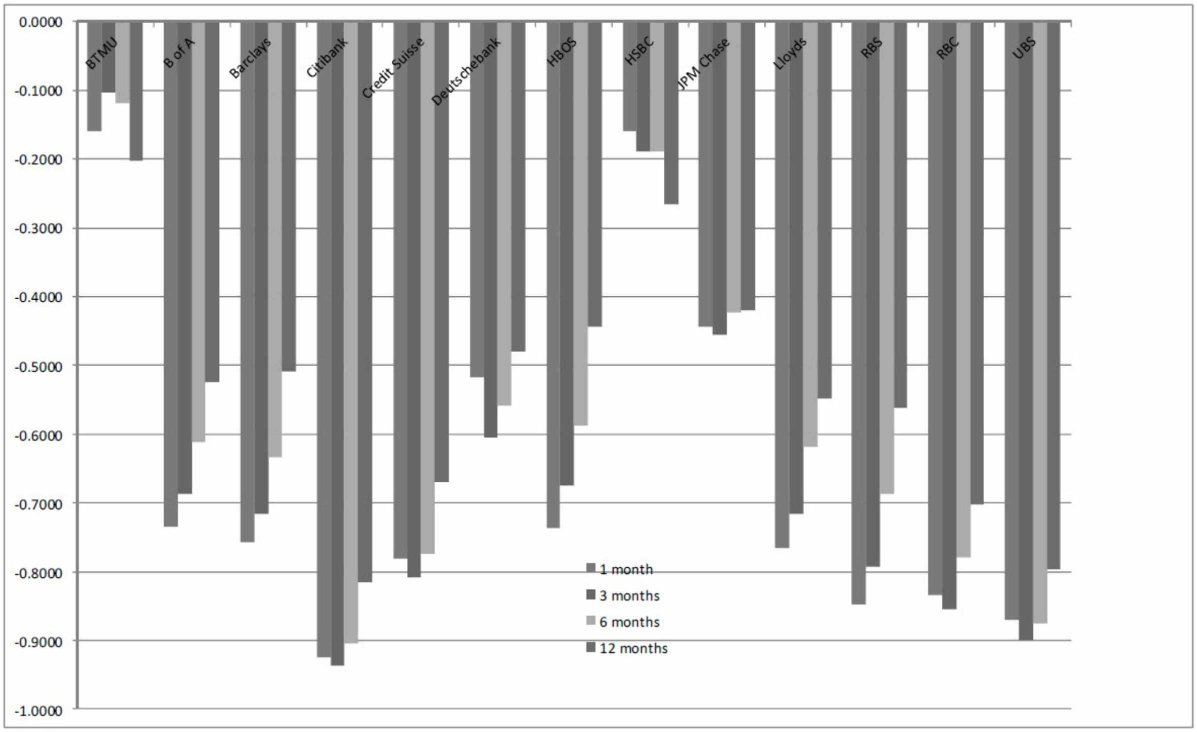
Graph 5

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

9 August 2007 - 12 September 2008 Period



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

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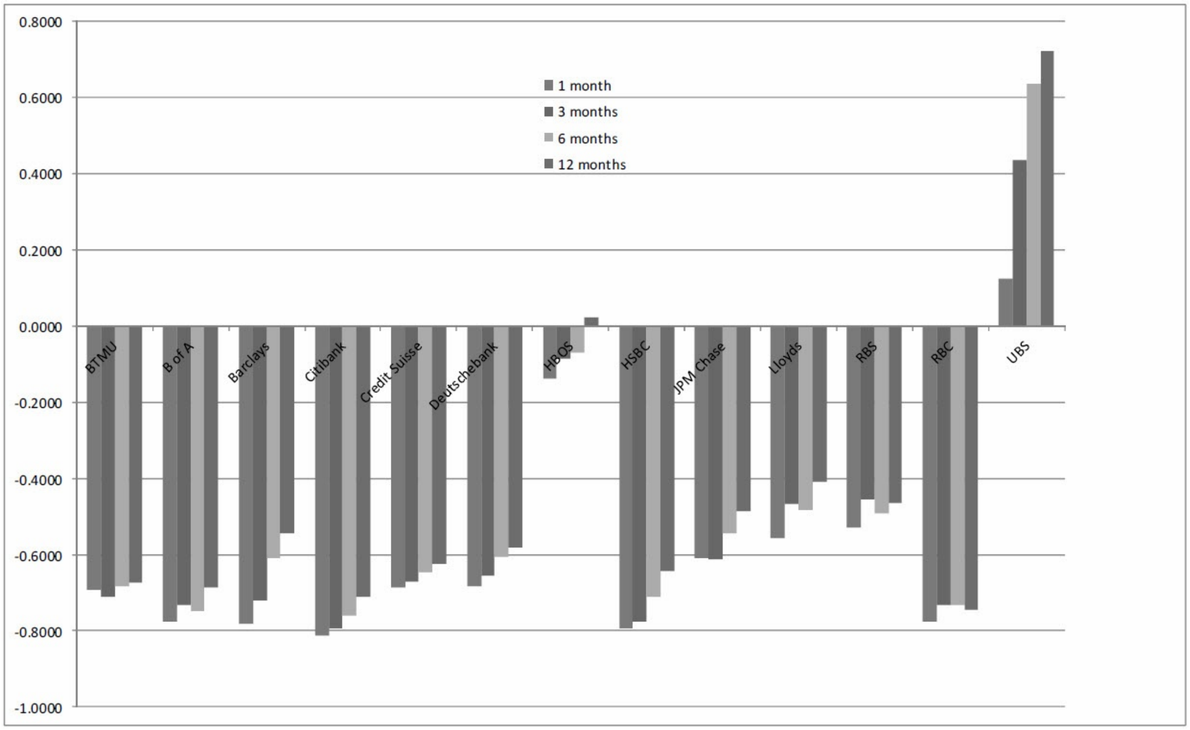
Graph 6

Correlation Coefficients

Between Each Bank's Daily LIBOR Bid and Probability of Default (PD)

15 September 2008 - 31 December 2008 Period



(Note: PDs are estimated daily using the reduced form model of Kamakura Risk Information Services.)

282. Expert statistical analysis has also demonstrated that there was a statistically significant deviation between LIBOR and the Federal Reserve Eurodollar Deposit Rate that would not occur in a properly functioning marketplace absent a conspiracy to manipulate LIBOR. This deviation is strong evidence, in conjunction with the admissions of members of the conspiracy, demonstrating the existence of a LIBOR manipulation conspiracy and the involvement of the Defendants in that conspiracy. The Defendants suppressed their LIBOR submissions, colluded to jointly suppress LIBOR submissions and

colluded to control the amount of LIBOR suppression in order to meet the needs of the co-conspirators.

283. The Federal Reserve Eurodollar Deposit Rate is a rate that is prepared and published by the U.S. Federal Reserve to reflect the rates at which banks in the London Eurodollar money market lend U.S. dollars to one another. This rate is analogous to LIBOR in that it is intended to reflect the true cost of borrowing in a given currency amongst financial institutions on any given day. The Federal Reserve Eurodollar Deposit Rate, however, is calculated and determined using a different methodology. The Federal Reserve Eurodollar Deposit Rate is based on data that the Federal Reserve obtains from Bloomberg and the ICAP brokerage company. The Federal Reserve Eurodollar Deposit Rate's calculation is not limited to sample self-reported data from 16 (now 18) banks chosen by the BBA. ICAP is a large broker-dealer in London in Eurodollar deposits. ICAP surveys its client banks and updates its Eurodollar deposit rates about 9:30 a.m. each morning.

284. Because of the nature of the relationship between the Federal Reserve Eurodollar Deposit Rate and LIBOR, it would be unusual even for one bank to submit a LIBOR bid below the Federal Reserve Eurodollar Deposit Rate. Therefore, if all of the Defendant banks submitted LIBOR bids below the Federal Reserve Eurodollar Deposit Rate, this would be strong evidence of collusion amongst the Defendants.

285. Under widely-recognized and accepted statistical analyses, it makes sense to use the Federal Reserve Eurodollar Deposit Rate as a measure to analyze the integrity of LIBOR and the Defendants' LIBOR submissions because there is a correlation between those rates. Statistically, this can be measured using the "spread," which in this case is the difference between the LIBOR figure from BBA and the Federal Reserve Eurodollar Deposit Rate.

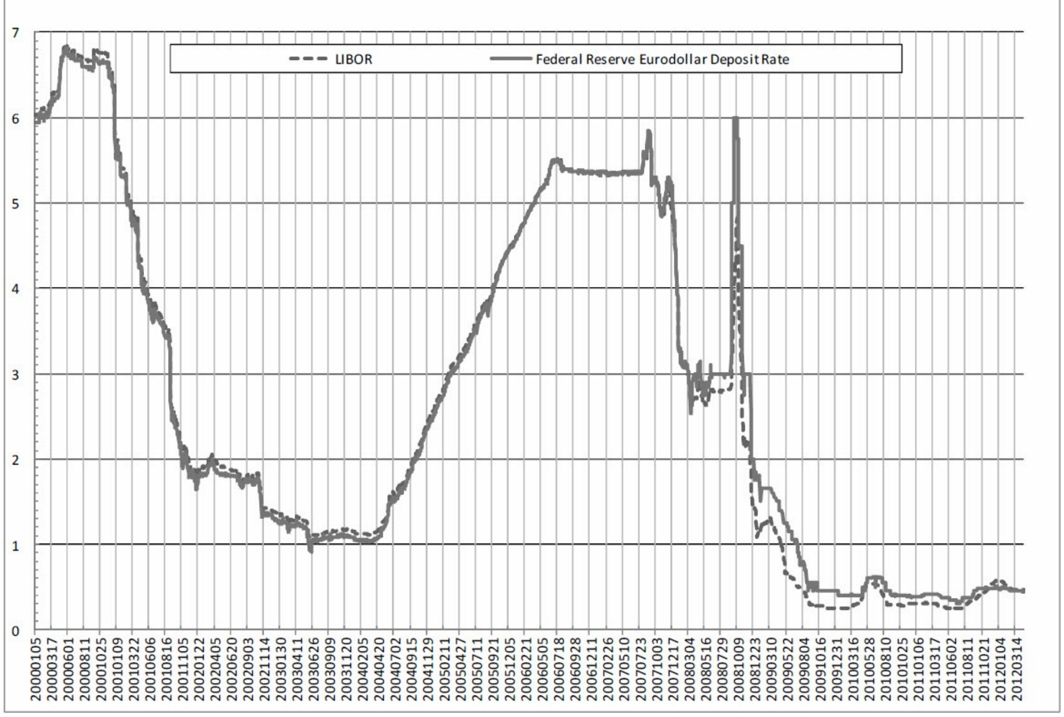
286. Since both LIBOR and the Federal Reserve Eurodollar Deposit Rate measure the lending cost to banks, important market and financial fundamentals, such as day-to-day changes in monetary policy, market risk and interest rates, as well as risk factors facing the banks generally (collectively "Market Fundamentals"), should be reflected similarly on both variables, and therefore should not affect the spread. In other words, the same market forces should have the exact same impact on both LIBOR and the Federal Reserve Eurodollar Deposit Rate. If the two rates start deviating, the only possible explanation is that there is rate manipulation since regular market forces cannot explain why the two rates are deviating. By focusing on the spread, the model factors out normal and expected co-movements in banks' LIBOR submissions that arise from normal changes in market fundamentals, as opposed to rate manipulation.

287. To analyze how well the Federal Reserve Eurodollar Deposit Rate captures changes in market fundamentals and absorbs variations in LIBOR that are driven by such market fundamentals, consulting experts hired by other plaintiffs used a regression analysis to measure the day-to-day changes in the spread against changes in the T-Bill rate and the commercial paper rate. The T-Bill rate and the commercial paper rate are essentially risk-free rates that would reflect changes in market fundamentals. This regression analysis shows that day-to-day changes in the Federal Reserve Eurodollar Deposit Rate effectively captures day-to-day movements in LIBOR caused by market fundamentals.

288. Because market fundamentals are fully captured by the spread, absent manipulation, the spread should always be zero or close to zero. Thus, any changes in the spread between the Federal Reserve Eurodollar Deposit Rate and LIBOR would not unrelated to market fundamentals. The evidence uncovered to date demonstrates that this spread can be explained best by LIBOR rate manipulation.

289. Figures 1 and 2 show the relationship between LIBOR, the Federal Reserve Eurodollar Deposit Rate, and the Spread beginning in 2000 and ending in mid 2012. As can be seen, between January 5, 2000 and August 7, 2007, the Federal Reserve Eurodollar Deposit Rate tracked LIBOR very closely and the spread remained positive and very close to zero. This suggests that the spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate effectively captures the shared risks of the banks sampled by BBA, Bloomberg and ICAP. The fact that the spread remains close to zero despite several major impacts on market fundamentals, including the bursting of the dot-com bubble and the terrorist attacks of September 11, 2001, demonstrate that the spread is able to successfully capture most, if not all, of the market fundamentals that could impact LIBOR and that any discrepancies between LIBOR and the Federal Reserve Eurodollar Deposit Rate is the result of LIBOR manipulation.

Figure 1: LIBOR and Federal Reserve Eurodollar Deposit Rate



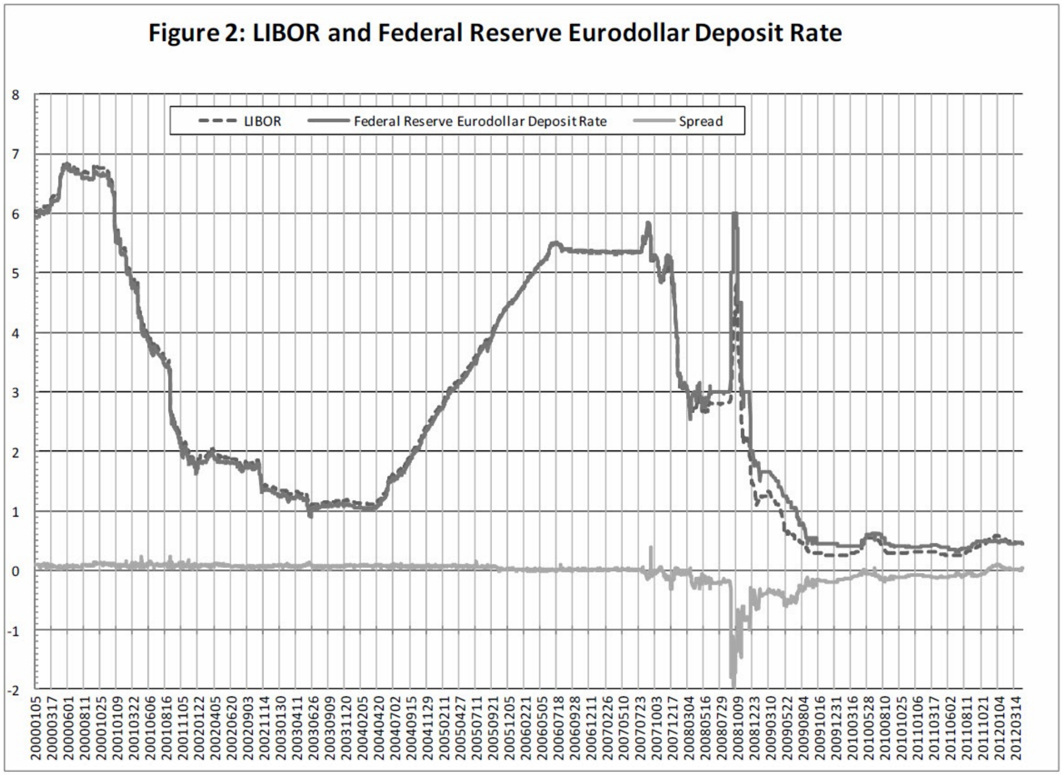
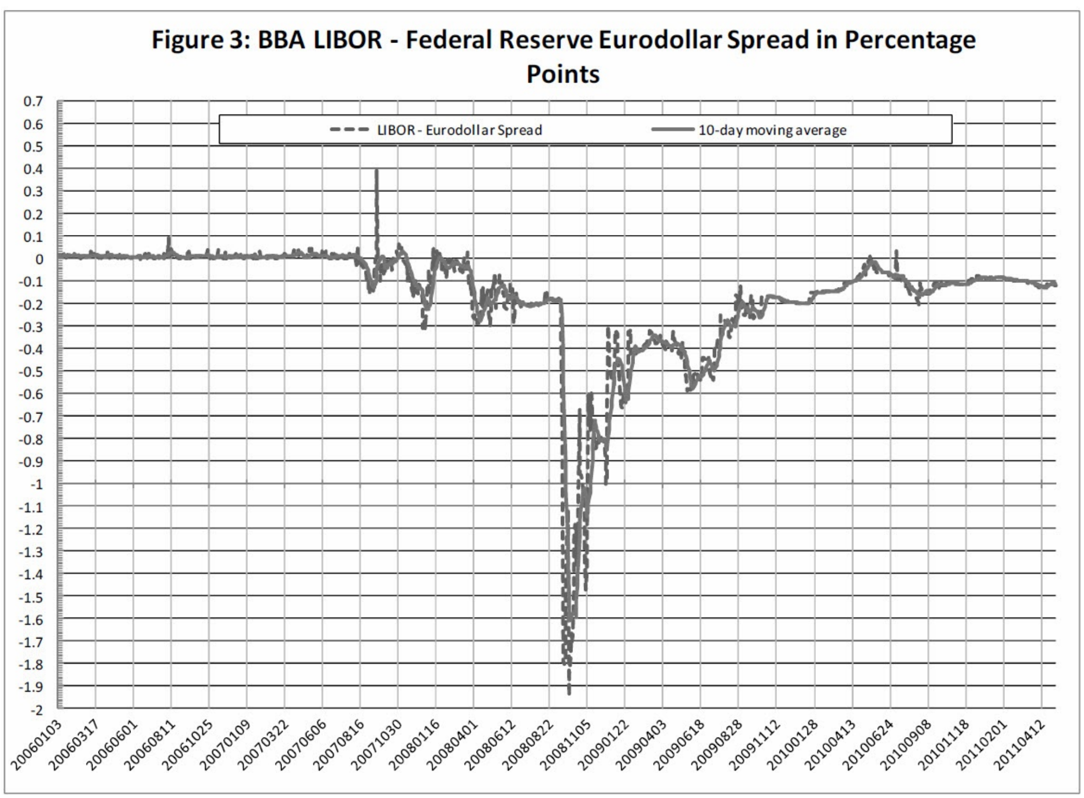


Figure 3 shows the spread between 3-month U.S. Dollar LIBOR and the Federal Reserve Eurodollar Deposit Rate from January 2006 through early April 2012.



290. Beginning in August of 2007, the statistical analysis shows that the spread had moved significantly into negative territory and remained there. The fact that the spread remained negative for a long period of time lends support to the assertion that this discrepancy was not the result of isolated incidents or statistical anomalies but the product of an intentional and prolonged effort to manipulate LIBOR. During the early part of August of 2007, the Federal Reserve Eurodollar Deposit Rate stayed around 5.36%. On August 8, the Federal Reserve Eurodollar Deposit Rate increased by 5 basis points to 5.41%, while LIBOR did not keep pace. The spread turned negative 3 basis points on August 8, 2007. The spread remained mostly negative after August 7, 2007 so that by August 15, 2007, the trailing 10-day moving-average of the spread also turned negative. By August 31, 2007, the Federal Reserve Eurodollar Deposit rate kept increasing to 5.78%, while LIBOR was lagging. The negative spread on August 31, 2007 grew to -16 basis points.

291. The spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate remained negative over the next year. Between August 31, 2007 and September 15, 2008, the spread remained negative on 234 of the 255 days, or 91.7% of the days. The magnitude of the negative spread averaged about -12 basis points. During this approximately one year period, the negative spread exceeded -25 basis points on 18 days. After many years of a spread being near zero, the fact that the spread would be consistently negative for such a long period could not be explained absent active manipulation.

292. The bankruptcy of Lehman Brothers on September 15, 2008 was a major shock to the global financial system and impacted LIBOR and the spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate. The increased concerns about the health of the big banks were reflected in substantial increases in the Federal Reserve Eurodollar Deposit Rate. On September 15, 2008, the Federal Reserve Eurodollar Deposit Rate equaled 3.0%, increasing to 3.2%,

3.75%, and 5% over the following three days. By September 30, 2012, the Federal Reserve Eurodollar Deposit Rate doubled to 6%.

293. After the Lehman Brothers bankruptcy, LIBOR did not keep pace with the Federal Reserve Eurodollar Deposit Rate, causing the spread to move deeper and deeper into negative territory. On September 16, 2008, the negative spread nearly doubled to -32 basis points. The next day, on September 17, 2008, the negative spread doubled again, reaching -69 basis points. On September 18, 2008, the negative spread more than doubled once again, reaching -180 basis points. By September 30, 2008, the negative spread reached -195 basis points.

294. Thus, between September 15, 2008 and September 30, 2008, the Federal Reserve Eurodollar Deposit Rate increased by 300 basis points to reflect increasing concerns about the financial condition of the Defendant banks, while LIBOR increased by less than one-half of that, during the exact same period. Both the Federal Reserve Eurodollar Deposit Rate and LIBOR should be reflecting the exact same market fundamentals. The deviation between the two rates strongly supports the finding that Defendants were intensifying their manipulation of LIBOR during this time, and did so not only to manipulate LIBOR to benefit their trading positions but also to understate their borrowing costs in the face of increasing concerns about the health of the banks.

295. The spread remained negative for more than one and a half years following the Lehman Brothers bankruptcy. The spread between LIBOR and the Federal Reserve Eurodollar Deposit Rate finally turned positive for the first time during the post-Lehman bankruptcy period on May 17, 2010. However, following this date, the Spread again became negative. The dramatic period of negative spread during the Relevant Period, following years of uniform behavior between each individual Defendants' LIBOR submissions and the Federal Reserve Eurodollar Deposit Rate, is consistent across all of the Defendant banks. Figures 4 to 19 show the negative spread on a bank by bank basis for all of the Defendants.

Figure 4: HSBC LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

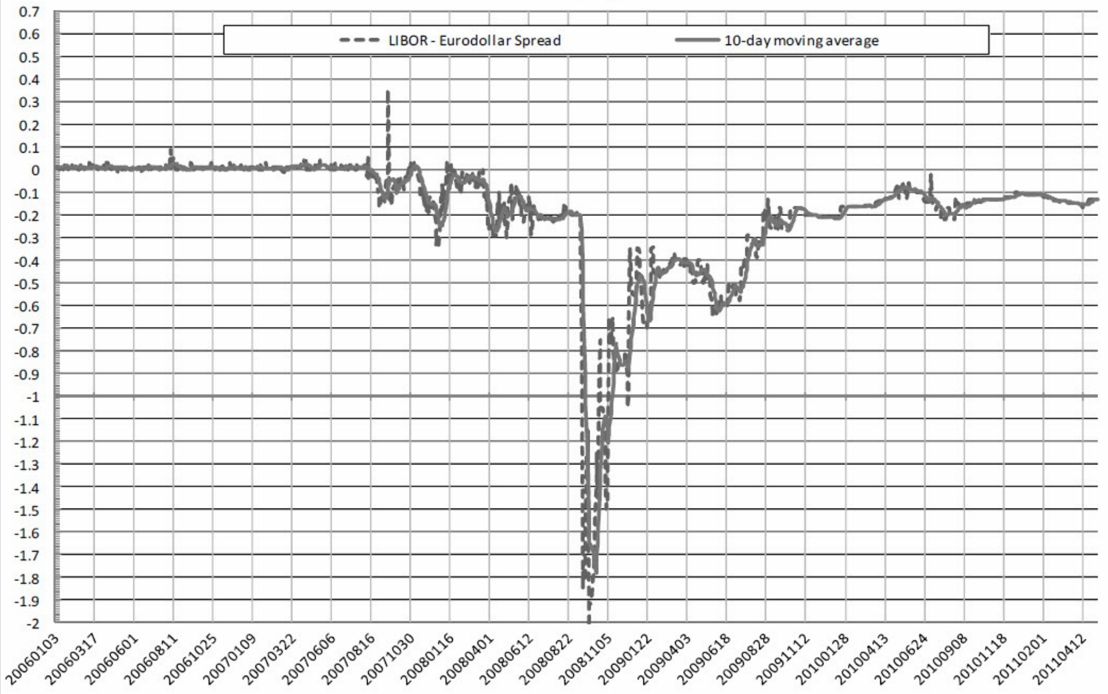


Figure 5: JPMorganChase LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

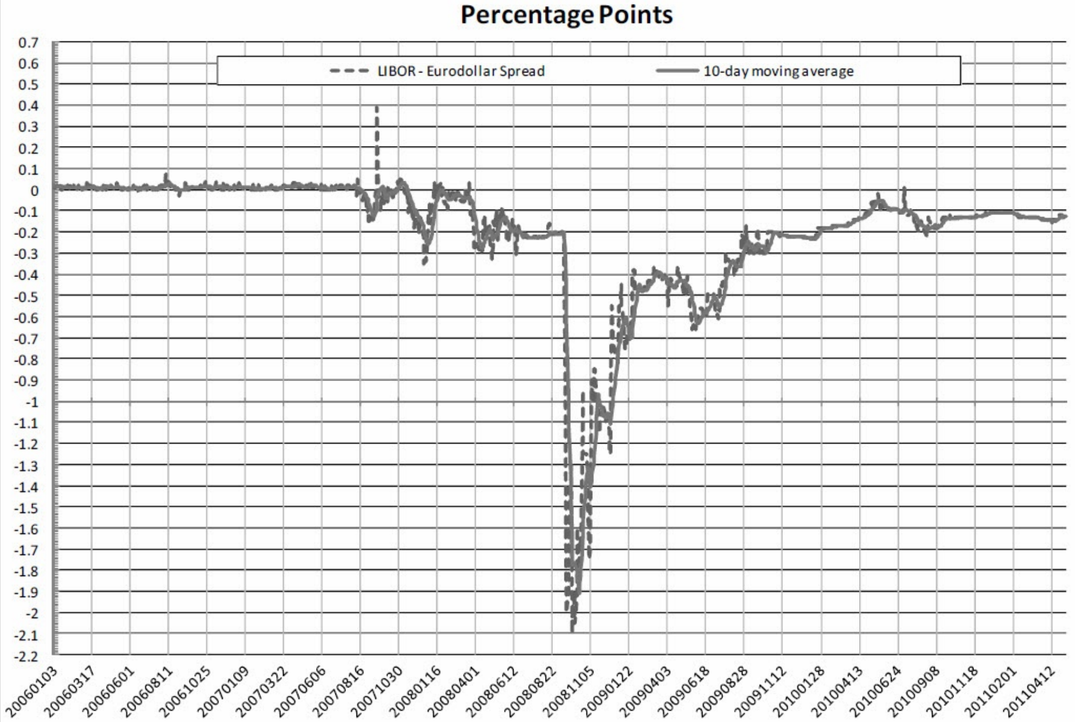


Figure 6: Barclays LIBOR - Federal Reserve Eurodollar Spread in Percentage Points

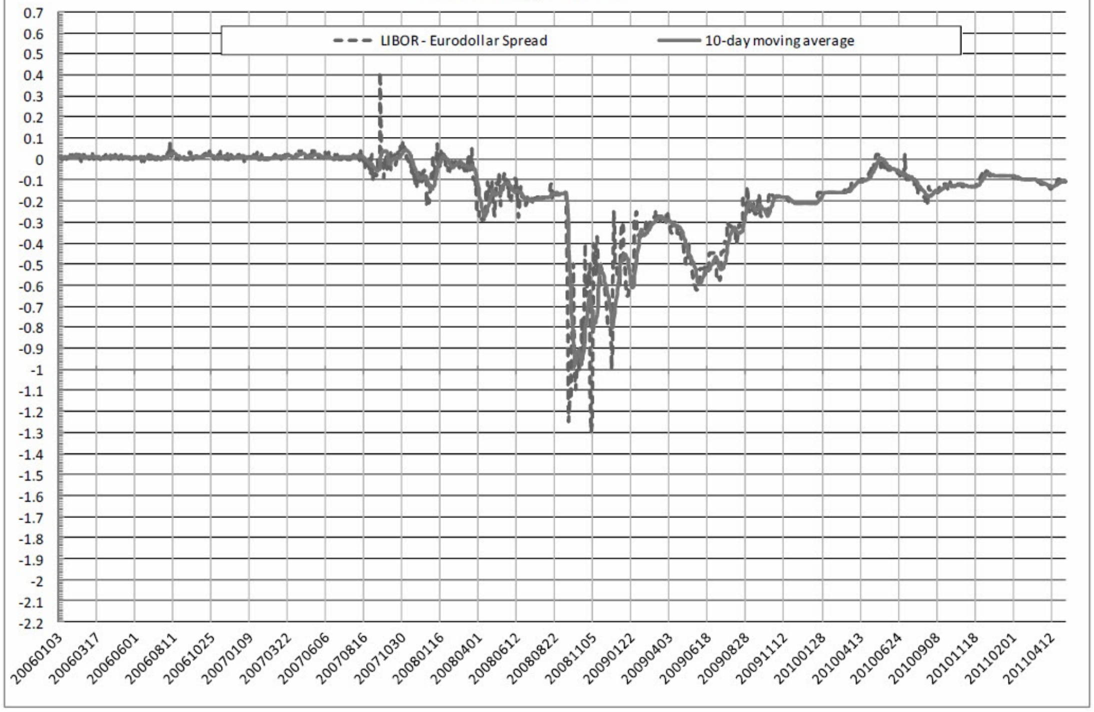
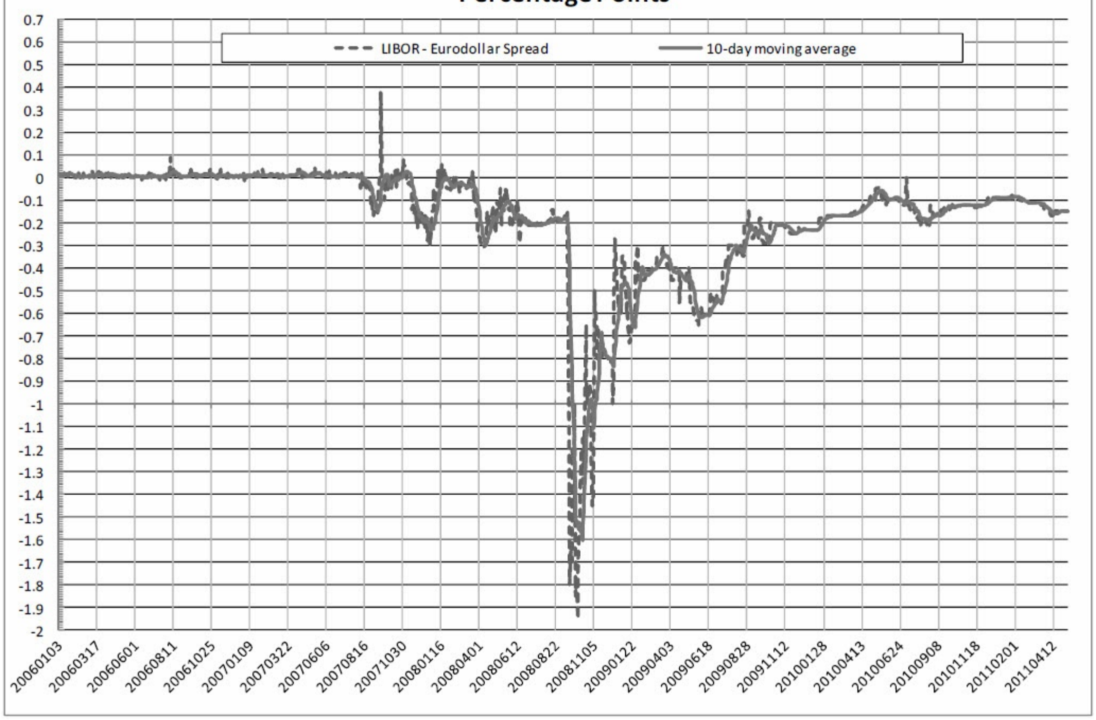


Figure 7: Deutsche Bank LIBOR - Federal Reserve Eurodollar Spread in Percentage Points



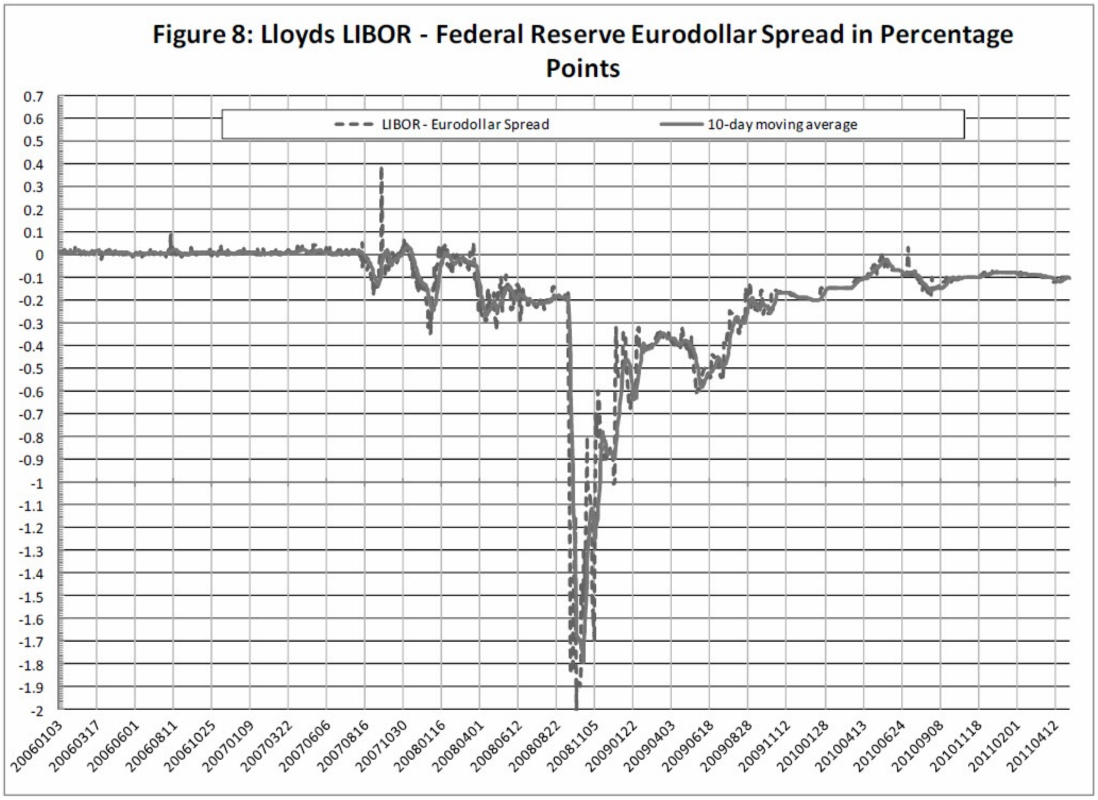


Figure 8: Lloyds LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

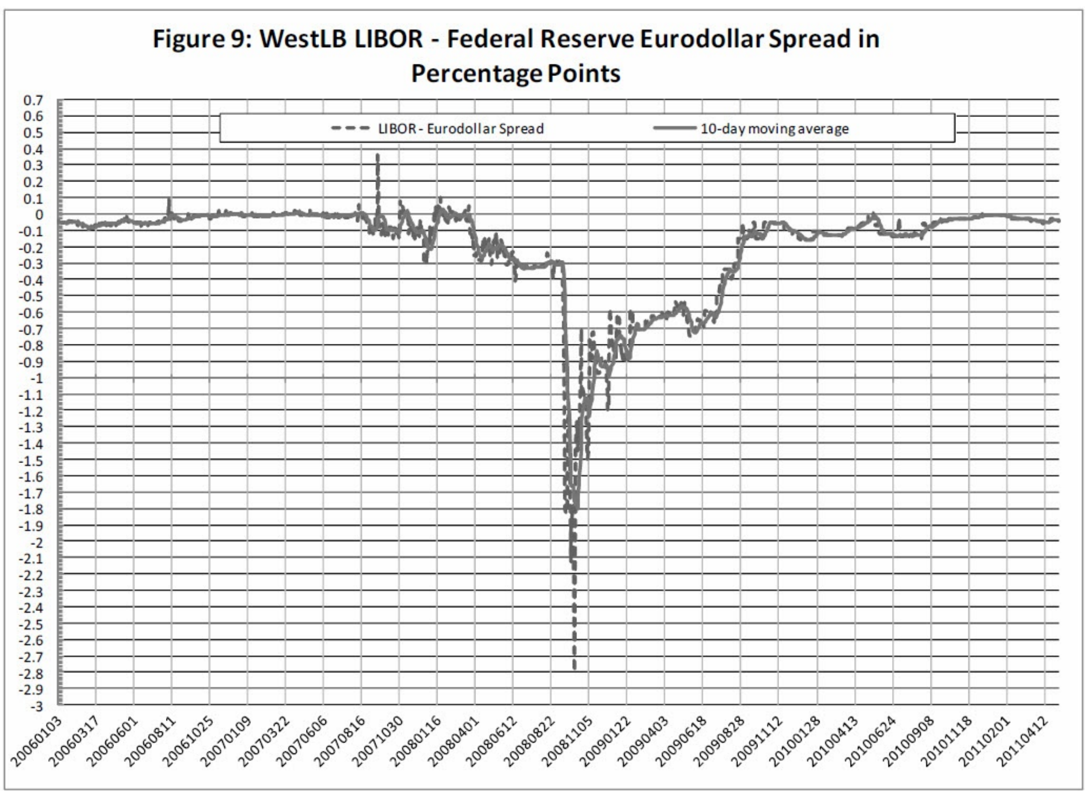


Figure 9: WestLB LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

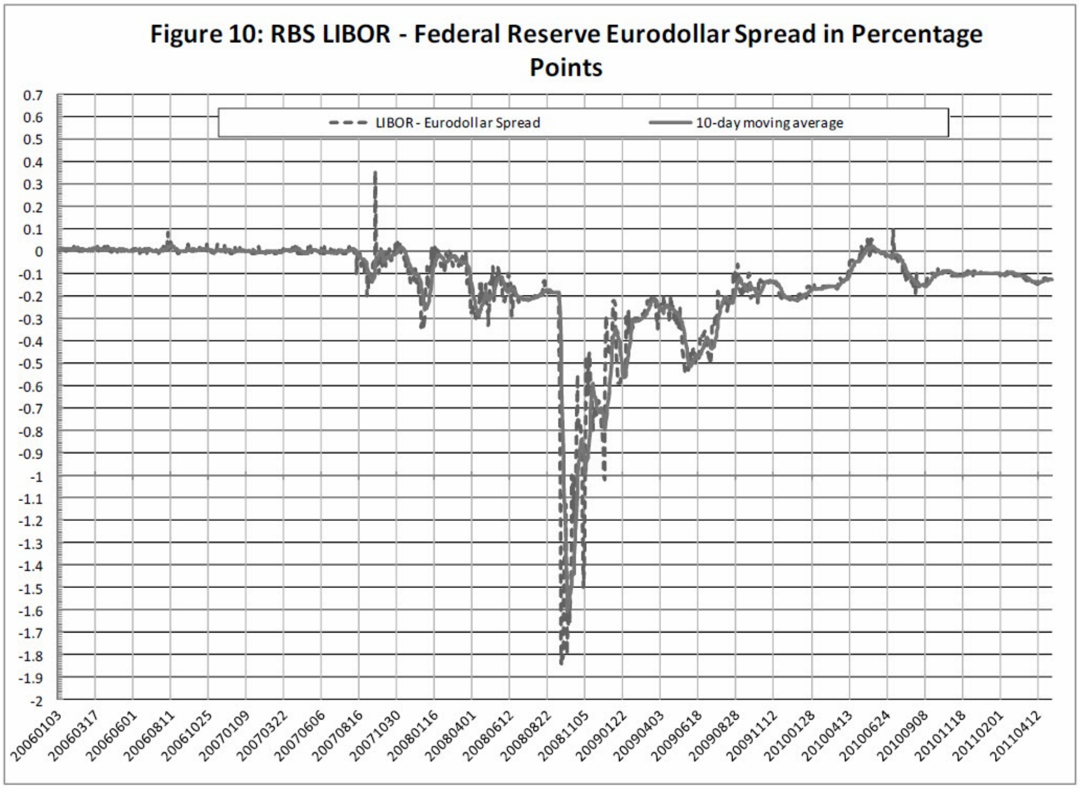


Figure 10: RBS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2
20060103
20060317
20060601
20060811
20061025
20070109
20070322
20070606
20070816
20071030
20080116
20080401
20080612
20080822
20081105
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20101118
20110201
20110412

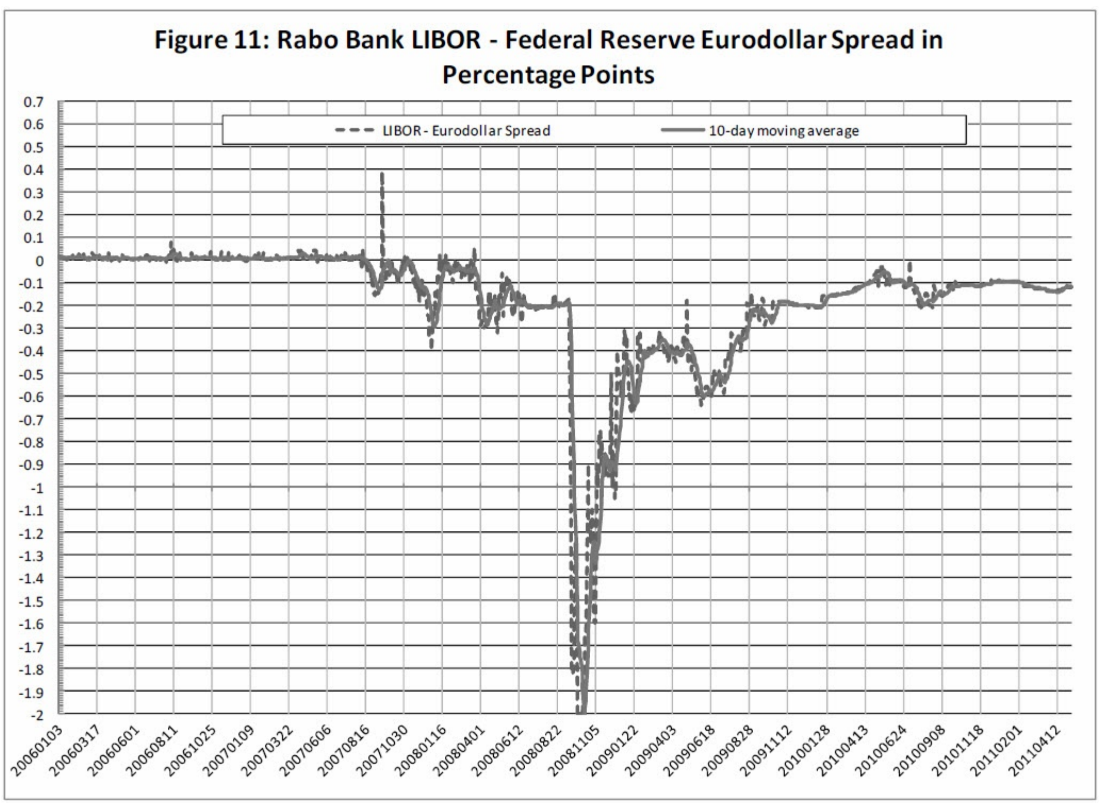
Figure 11: Rabo Bank LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1
-1.1
-1.2
-1.3
-1.4
-1.5
-1.6
-1.7
-1.8
-1.9
-2
20060103
20060317
20060601
20060811
20061025
20070109
20070322
20070606
20070816
20071030
20080116
20080401
20080612
20080822
20081105
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20101118
20110201
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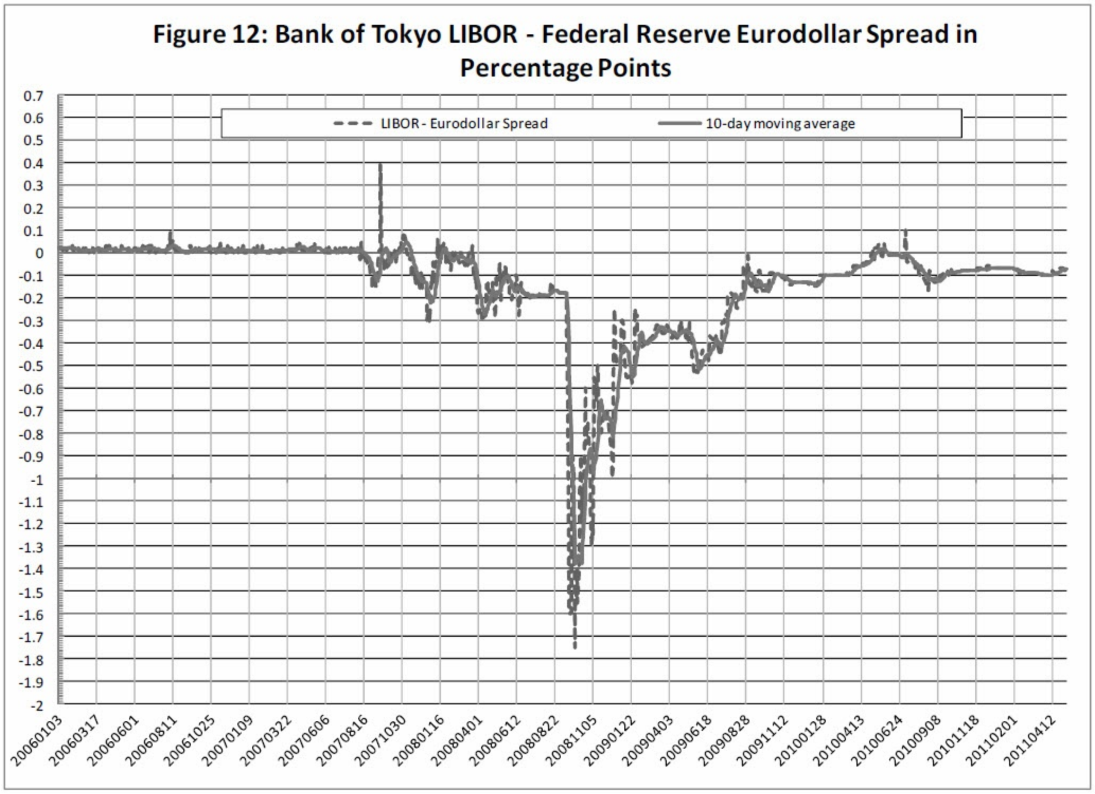
Figure 12: Bank of Tokyo LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

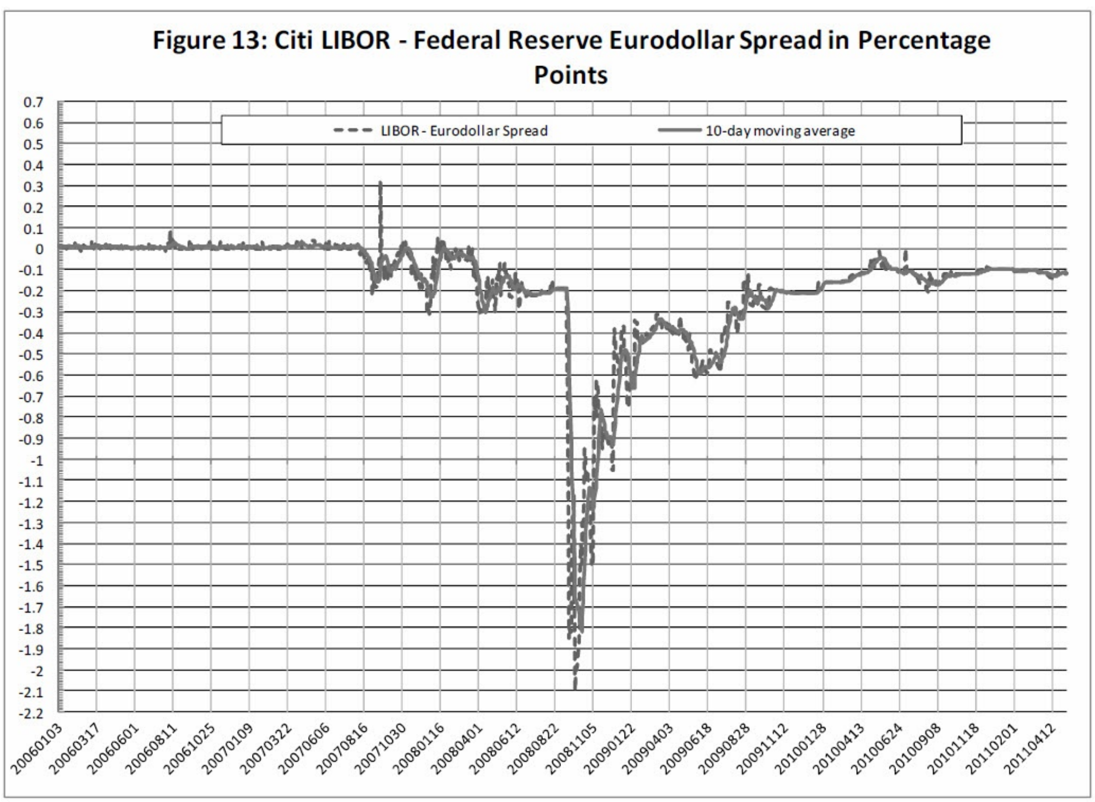
Figure 13: Citi LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

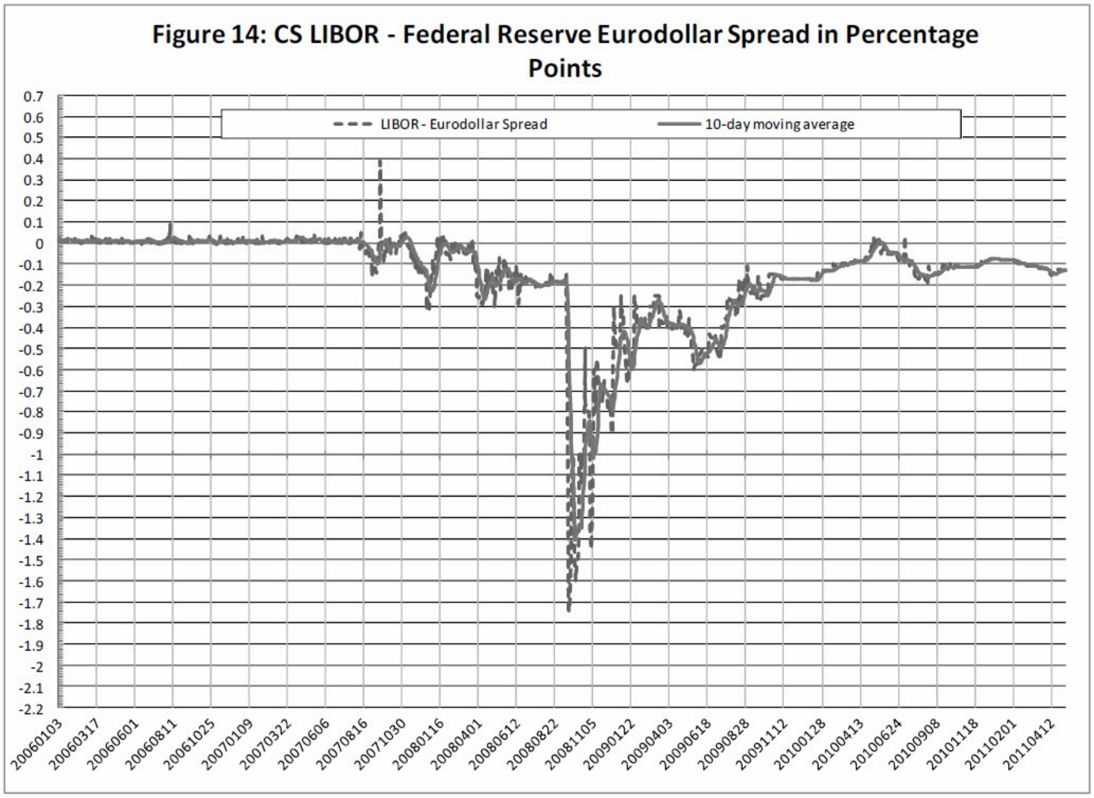
Figure 14: CS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

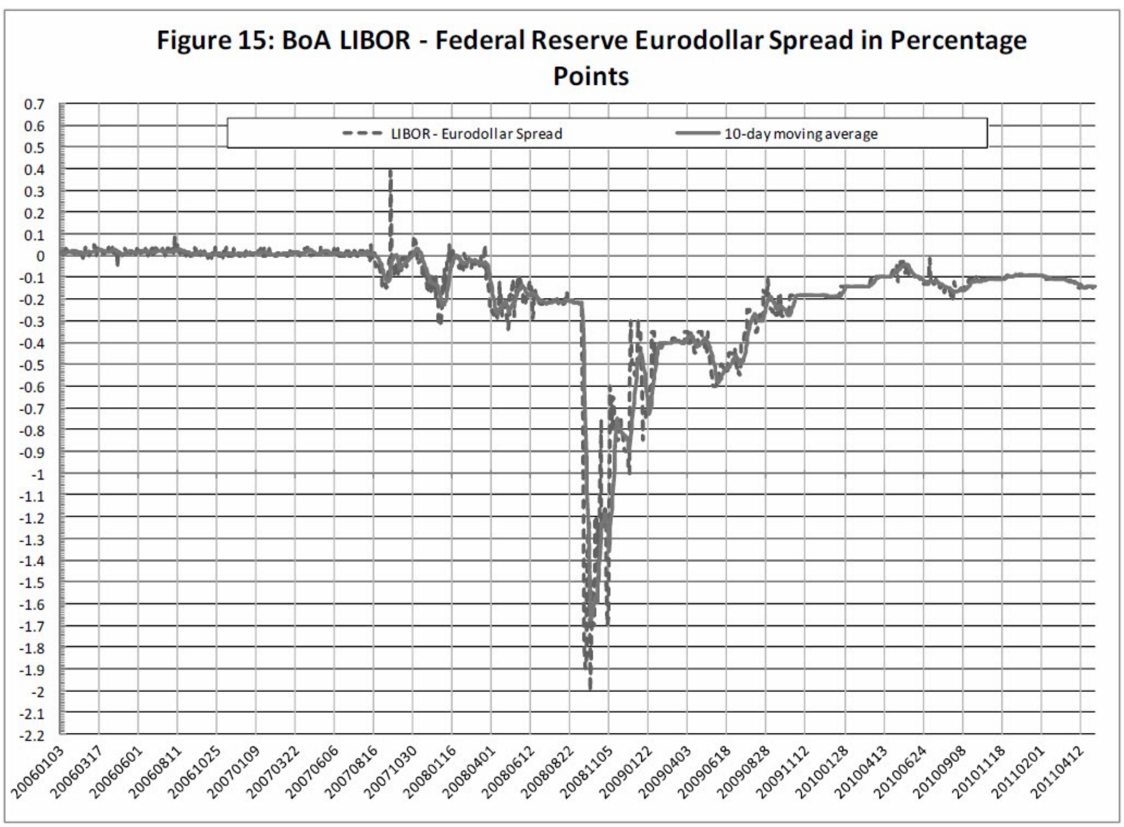
Figure 15: BoA LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

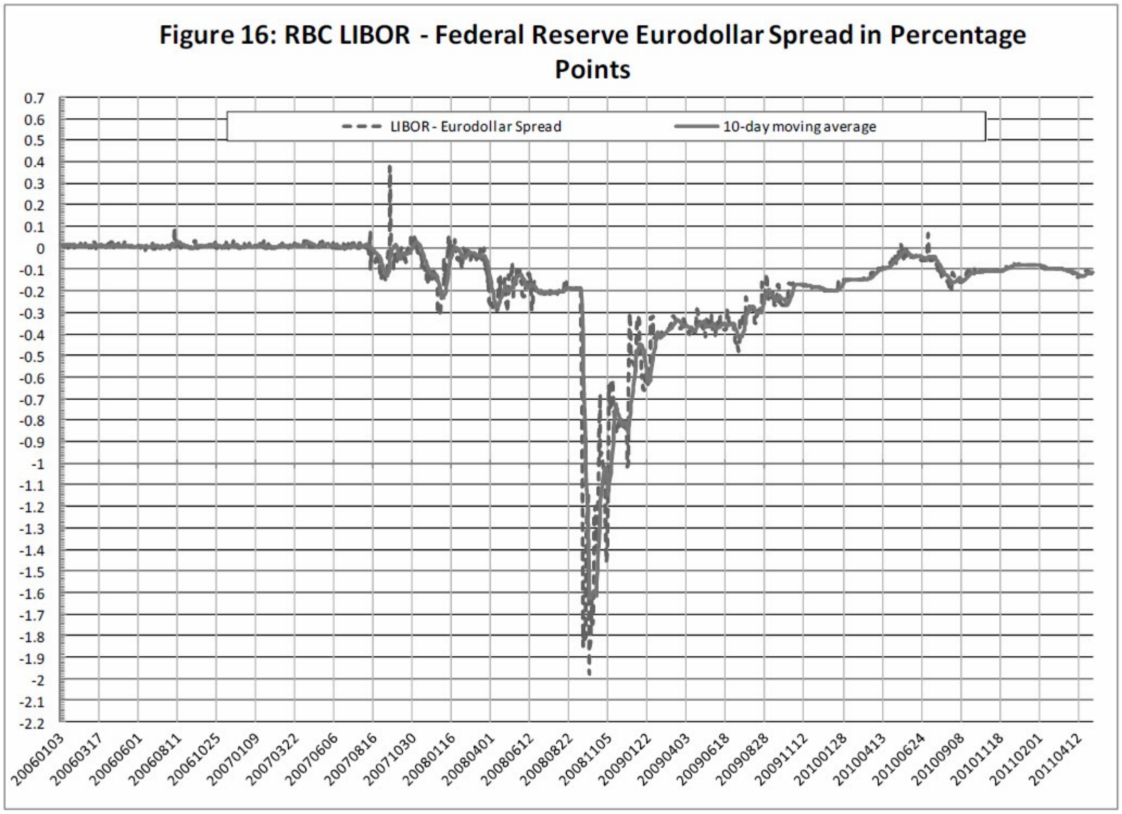
Figure 16: RBC LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

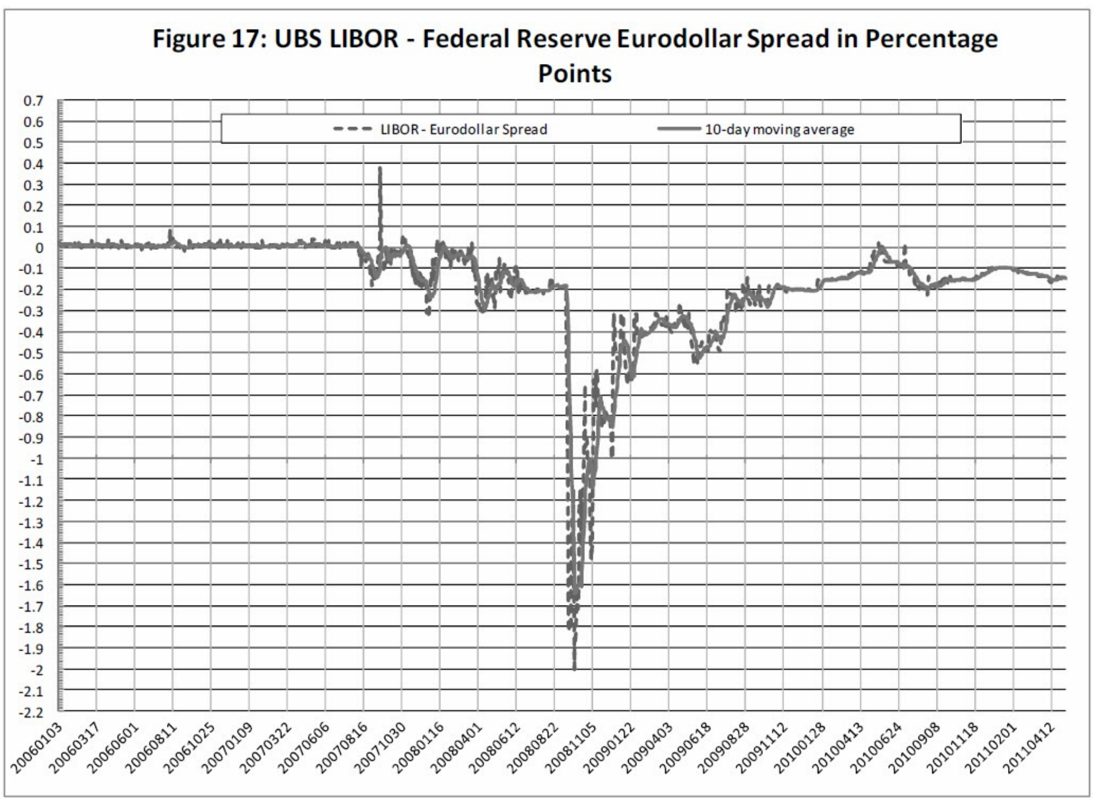
Figure 17: UBS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

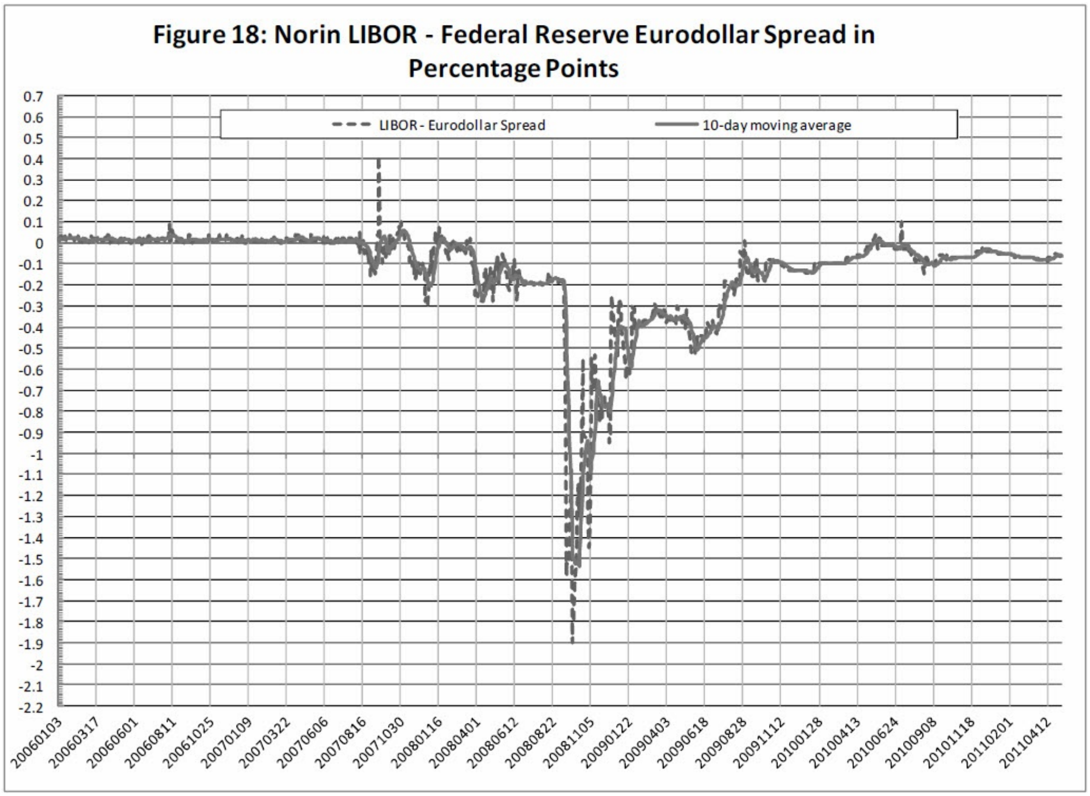
Figure 18: Norin LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

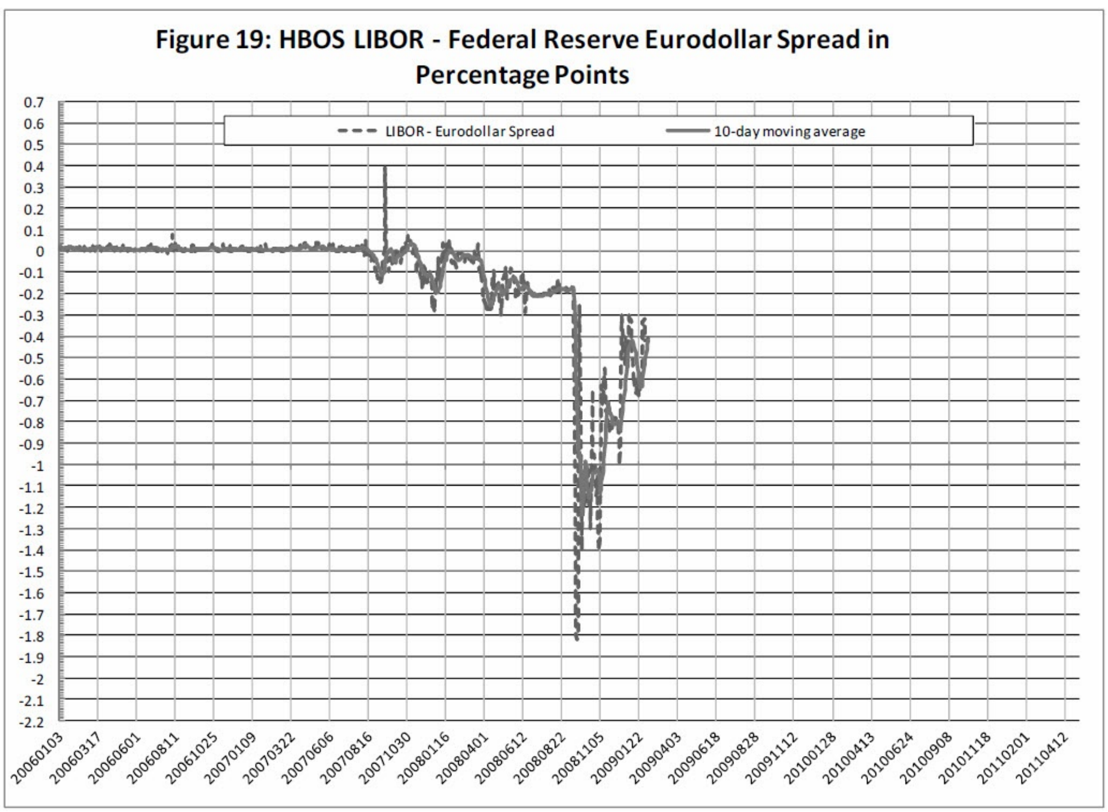
Figure 19: HBOS LIBOR - Federal Reserve Eurodollar Spread in Percentage Points
LIBOR - Eurodollar Spread
10-day moving average

296. As the following chart demonstrates, the average spread between LIBOR and the Federal Reserve Deposit Rate for each of the individual Defendants was uniformly negative throughout the entire Relevant Period, strongly supporting that each of these banks was part of the conspiracy to manipulate their LIBOR submissions and thereby artificially suppressing reported LIBOR.

BANK NAME	Average Spread between August 8, 2007 through May 17, 2010
1. Bank of Tokyo-Mitsb.	-25 basis points
2. Bank of America	-30 basis points
3. Barclays	-25 basis points
4. Citi	-32 basis points
5. CSFB	-27 basis points
6. Deutsche Bank	-31 basis points
7. HBOS	-29 basis points
8. HSBC	-32 basis points
9. JP Morgan Chase	-35 basis points
10. Lloyds	-30 basis points
11. Norin Bank	-25 basis points
12. Rabo Bank	-32 basis points
13. Royal Bank of Canada	-28 basis points
14. Royal Bank of Scotland	-26 basis points
15. UBS	-29 basis points
16. West	-35 basis points

297. Moreover, as set forth in the following chart, during the critical two week period following the bankruptcy of Lehman Brothers, each of the Defendants dramatically increased its collusive suppression of LIBOR.

BANK NAME		Average Spread between September 16, 2008 and September 30, 2008
1.	Bank of Tokyo-Mitsb.	-120 basis points
2.	Bank of America	-144 basis points
3.	Barclays	-87 basis points
4.	Citi	-142 basis points
5.	CS	-122 basis points
6.	Deutsche Bank	-129 basis points
7.	HBOS	-110 basis points
8.	HSBC	-141 basis points
9.	JP Morgan Chase	-153 basis points
10.	Lloyds	-146 basis points
11.	Norin Bank	-126 basis points
12.	Rabo Bank	-143 basis points
13.	Royal Bank of Canada	-140 basis points
14.	Royal Bank of Scotland	-140 basis points
15.	UBS	-141 basis points
16.	West	-138 basis points

298. As detailed above, statistical analyses based on common and well-accepted methodologies strongly supports the conclusion that suppression of LIBOR occurred during the Relevant Period, accomplished through the collusive conduct of all of the Defendants. The sustained period during which the Federal Reserve Eurodollar Deposit - LIBOR spread fell and remained starkly negative, as seen in Figure 2 above, is not plausibly achievable absent collusion among Defendants. The intensified suppression from September 16, 2008 to September 30, 2008 (following the Lehman bankruptcy), in defiance of economic expectations, provides further support for the suppression of LIBOR achieved through collusion by Defendants. The Lehman Brothers bankruptcy also provides a strong explanation for the motivation behind the LIBOR manipulation

conspiracy. With the eyes of the world on Lehman Brothers and its impact on the other financial institutions, all of the Defendants had a strong motivation to take part in the manipulation because none of the Defendants could stand being the "odd man out."

299. Because no Defendant member bank of the BBA - absent collusive conduct - could know what LIBOR submission another Defendant member bank of the BBA actually submitted prior to those numbers being made public after 11:00 a.m. London time, the fact that all Defendants submitted LIBOR submissions below the Federal Reserve Eurodollar Deposit Rate over the Relevant Period provides strong evidence that each of the Defendants were involved in the suppressive and collusive scheme. If only a single Defendant had made LIBOR submissions below the Federal Reserve Eurodollar Deposit Rate, it could have been a statistical anomaly. It would also have been ineffective in manipulating LIBOR over a sustained period of time. Consistent and prolonged LIBOR submissions below the Federal Reserve Eurodollar Deposit Rate, by all of the Defendant banks, demonstrates a wide-ranging conspiracy amongst the Defendants.

J. Empirical Analyses Indicate LIBOR's Artificial Suppression

300. In addition to the independent expert work detailed above, analyses by academics and other commentators likewise support Plaintiff's allegations. While those studies used various comparative benchmarks and did not employ uniform methodologies, they collectively indicate LIBOR was artificially suppressed during the Relevant Period.

1. The Discrepancy Between Defendants' reported LIBOR and Their CDS Spreads Indicates the Banks Misrepresented Their Borrowing Costs to the BBA

301. One economic indicator that Defendants suppressed U.S. Dollar LIBOR during the Relevant Period is the variance between the Defendants' LIBOR submissions and their contemporaneous cost of buying default insurance,

in other words a Credit Default Swap ("CDS"), on debt they issued during that period. As discussed above, a CDS is essentially insurance against the default on an instrument or a party. Typically, with a CDS, the CDS buyer makes a series of payments (often referred to as the CDS "fee" or "spread") to the CDS seller in exchange for a fixed payment in the event of default. The CDS fee or spread is akin to a premium that is paid in order to obligate the CDS seller to make a payment when a specific event (in this case a default) occurs.

302. The CDS fee or spread serves as a measure of the perceived risk of default by the entity issuing the underlying instrument against which the CDS is based. The greater the risk of default on the underlying financial instrument, the greater the CDS spread. In the case of a CDS for which the underlying instrument consists of an interbank loan where a U.S. Dollar LIBOR Contributor Panel bank is the borrower, the greater the perceived risk the BBA Contributor Panel bank will default on the loan, the higher the applicable CDS spread, as this higher spread represents the cost of insuring against the increased risk of a default on the underlying loan. Basically, the CDS fee or spread reflects the same thing that LIBOR does, which is the risk of default on U.S. Dollar LIBOR Contributor Panel banks. Therefore, if the CDS fee or spread begins to increase, that means the market is concerned about the risk of default, and LIBOR should also increase to reflect the same concern.

303. As one commentator has observed, "The cost of bank default insurance has generally been positively correlated with LIBOR. That is, in times when banks were thought to be healthy, both the cost of bank insurance and LIBOR decreased or remained low, but when banks were thought to be in poor condition, both increased." During the Relevant Period, however, those historically-correlated indicia of banks' borrowing costs diverged significantly.

304. That discrepancy was detailed in a May 29, 2008 *Wall Street Journal* article reporting the results of a study it had commissioned. *The Wall Street*

Journal's analysis indicated numerous banks caused LIBOR, "which is supposed to reflect the average rate at which banks lend to each other," to "act as if the banking system was doing better than it was at critical junctures in the financial crisis." *The Wall Street Journal* found that beginning in January 2008, "the two measures began to diverge, with reported LIBOR rates failing to reflect rising default-insurance costs."

305. *The Wall Street Journal* observed that the widest gaps existed with respect to the LIBOR quotes of Defendants Citigroup, WestLB, HBOS, JPMorgan, and UBS. According to the Wall Street Journal, the Citigroup Defendants' LIBOR submissions differed the most from what the CDS market suggested the bank's borrowing cost was. Defendant Citigroup is one of the banks heavily implicated in the global probe into manipulation of global benchmark interest rates. On average, the rates at which Citigroup reported it could borrow dollars for three months (*i.e.*, its three-month LIBOR rates) were about 87 basis points lower than the rates calculated using CDS data. Based on the massive dollar amounts at stake in LIBOR-linked transactions and financial instruments, an 87 basis point manipulation equates to hundreds of millions of dollars for Defendant Citigroup alone.

306. Defendants WestLB, HBOS, JPMorgan, and UBS likewise exhibited significant discrepancies between LIBOR and CDS fees/spreads of 70, 57, 43, and 42 basis points, respectively. Defendants Credit Suisse, Deutsche Bank, Barclays, HSBC, Lloyds, and RBS each exhibited discrepancies of approximately 30 basis points, on average. The study's authors concluded "one possible explanation for this gap is that banks understated their borrowing rates." This study, in conjunction with the other evidence of collusion, demonstrates that there was widespread collusion amongst the Defendants during the Relevant Period.

307. Citing another example of suspicious conduct, *The Wall Street Journal* observed that on the afternoon of March 10, 2008, investors in the CDS

market were betting that Defendant WestLB, hit especially hard by the credit crisis, was nearly twice as likely to renege on its debts as Defendant Credit Suisse, which was perceived to be in better shape, yet the next morning the two banks submitted identical LIBOR submissions. Absent manipulation, this result would be impossible since their costs of borrowing could not have been the same.

308. Additionally, having compared the Defendants' LIBOR submissions to their actual costs of borrowing in the commercial-paper market, *The Wall Street Journal* reported that there were wide discrepancies. For example, in mid-April 2008, Defendant UBS paid 2.85% to borrow dollars for three months, but on April 16, 2008, the bank quoted a borrowing cost of 2.73% to the BBA.

309. *The Wall Street Journal* further noted an uncanny convergence between the U.S. Dollar Contributor Panel's LIBOR submissions: the three-month borrowing rates the banks reported remained within a range of only 0.06 of a percentage point, even though at the time their CDS insurance costs (premiums) varied far more widely, reflecting the market's differing views as to the Defendants' creditworthiness.

310. According to Stanford University professor Darrell Duffie, with whom the authors of *The Wall Street Journal* article consulted, the unity of the Defendants' LIBOR submissions was "far too similar to be believed."

311. David Juran, a statistics professor at Columbia University who reviewed *The Wall Street Journal's* methodology, similarly concluded that *The Wall Street Journal's* calculations demonstrate "very convincingly" that reported LIBOR rates are lower, to a statistically significant degree, than what the market thinks they should be. At that time, statisticians and academics were attempting to determine why the LIBOR submissions would diverge so much from the true costs of borrowing for these financial institutions. Revelations from the Barclays' settlement, the UBS amnesty application and from various government

investigations now show that the explanation for this divergence was a conspiracy amongst the Defendants to manipulate LIBOR.

312. As part of an exercise to determine the impact of this divergence, *The Wall Street Journal* calculated an alternate borrowing rate incorporating CDS spreads. *The Wall Street Journal* estimated that underreporting of LIBOR had a $45 billion effect on the market, representing the amount borrowers (the banks) did not pay to lenders (investors in debt instruments issued by the banks) that they would otherwise have had to pay. Plaintiff was among those lenders who have suffered significant damage in the form of reduced payments.

313. According to *The Wall Street Journal*, it had three independent academics, including Professor Duffie, review its methodology and findings, at the paper's request. All three agreed that the methodology was sound and that its findings were based on well-accepted statistical and economic principles.

314. Further economic analyses support the correlation seen in *The Wall Street Journal's* report. A study by Connan Snider and Thomas Youle, of the economics departments at UCLA and the University of Minnesota respectively, released in April 2010, concluded that LIBOR did not accurately reflect average bank borrowing costs, its "ostensible target." Noting that "[i]n a competitive interbank lending market, banks' borrowing costs should be significantly related to their perceived credit risk," Snider and Youle posited that if LIBOR submissions "express true, competitively determined borrowing costs," they should "be related to measures of credit risks, such as the cost of default insurance." According to Snider and Youle, the U.S. Dollar LIBOR Contributor Panel banks submitted LIBOR quotes that deviated significantly from their costs of borrowing, as reflected in CDS spreads.

315. For example, comparing the 12 month U.S. Dollar LIBOR submissions of Defendants Citigroup and Tokyo-Mitsubishi, together with the banks' respective one-year senior CDS spreads, Snider and Youle observed "that

while Citigroup has a substantially higher CDS spread than [Tokyo-Mitsubishi], it submits a slightly lower Libor quote." Accordingly, the authors explain, while the CDS spreads "suggest that the market perceives Citigroup as riskier than [Tokyo-Mitsubishi], as it is more expensive to insure against the event of Citigroup's default," the banks' LIBOR quotes "tell the opposite story."

316. Snider and Youle noted that the size of the difference between Defendant Citigroup's CDS spread relative to its LIBOR submissions was "puzzling." The authors explained, "Given that purchasing credit protection for a loan makes the loan risk free, one would expect [the] difference between the loan rate and the CDS spread to roughly equal the risk free rate. This corresponds to the idea that a loan's interest rate contains a credit premium, here measured by the CDS spread." But the authors observed that Defendant Citigroup's LIBOR submissions were often "significantly below its CDS spread," implying "there were interbank lenders willing to lend to Citigroup at rates which, after purchasing credit protection, would earn them a guaranteed 5 percent loss." That discrepancy contravenes basic rules of economics and finance. This demonstrates that Defendant Citigroup artificially suppressed LIBOR by underreporting its true cost of borrowing. The fact that these results were commonplace amongst all of the Defendants demonstrates that this was the byproduct of a conspiracy and not individual action by various actors.

2. Cross-Currency Discrepancies in Defendants' LIBOR Submissions Indicate They Suppressed USD-LIBOR

317. Defendants' LIBOR submissions also displayed inexplicable "cross-currency rank reversals." According to Snider and Youle, at least some Defendants reported lower rates on U.S. Dollar LIBOR than did other Contributor Panel members but, for other currencies, provided higher rates than did those same fellow banks. Defendants Bank of America and Tokyo-Mitsubishi, for instance, provided submissions for both U.S. Dollar LIBOR and Yen-LIBOR during the

period under study, yet Defendant Bank of America quoted a lower rate than Tokyo-Mitsubishi for U.S. Dollar LIBOR and a higher rate for Yen-LIBOR. Other Defendants included in Snider and Youle's analysis, including Defendants Barclays, Citigroup, and JPMorgan, displayed similar anomalies across currencies. Defendant Citigroup, for example, often reported rates at the top of the Yen-LIBOR scale while simultaneously quoting rates at the bottom of the U.S. Dollar scale. Because, "the same bank is participating in each currency," the credit risk "is the same for loans in either currency"; thus these "rank reversals" demonstrate that differences in the banks' LIBOR quotes "are not primarily due to differences in credit risk, something we would expect of their true borrowing costs." The discrepancy can only be explained by intentional manipulation of LIBOR by a number of member banks working together.

3. **<u>The Frequency With Which at Least Certain Defendants' LIBOR Submissions "Bunched" Around the Fourth-Lowest Quote of the Day Suggests Manipulation</u>**

318. During the Relevant Period, the rates reported by certain Defendants, in particular Defendants Citigroup, Bank of America and JPMorgan, reveals suspicious "bunching" around the fourth lowest quote submitted by the 16 U.S. Dollar LIBOR Contributor Panel banks to the BBA. Indeed, the submission by the Citigroup Defendants and the Bank of America Defendants often tended to be identical to the fourth-lowest quote for the day. Because the LIBOR calculation involved excluding the lowest (and highest) quartiles on any given day, "bunching" around the fourth-lowest rate statistically would push LIBOR to the lowest possible level. Having multiple Contributor Panel banks reporting at the fourth-lowest quote, statistically speaking, would have a powerful effect of driving the reported LIBOR rate to the lowest possible rate.

319. "Bunching" among Defendants' respective LIBOR submissions also indicates the Defendants intended to report the same or similar rates, notwithstanding the banks' differing financial conditions, which should have

resulted in differing LIBOR submissions if those LIBOR submissions were true reflections of that bank's true cost of borrowing, which LIBOR was supposed to reflect. This "bunching" is strong evidence of collusion and demonstrates an intentional effort to subvert the most commonly used global benchmark interest rate to benefit the Defendants to the detriment of others, such as the Plaintiff.

320. According to Snider and Youle, the fact that observed "bunching" occurred around the pivotal fourth-lowest reported rate reflects the reporting banks' intention to ensure the lowest borrowing rates were included in the calculation of U.S. Dollar LIBOR.

321. Further demonstrating the aberrant nature of the observed bunching around the fourth-lowest quote, Snider and Youle noted "the intraday distribution of other measures of bank borrowing costs do not exhibit this bunching pattern." Put simply, LIBOR was uniquely experiencing "bunching" as opposed to other measures that were intended to represent the same thing. This is strong evidence that LIBOR submissions were being manipulated and were not accurately reflecting what LIBOR was supposed to.

322. Additionally, Snider and Youle detailed a discrepancy between U.S. Dollar LIBOR Contributor Panel banks' LIBOR submissions and their CDS spreads. "[W]ith the intra-day variation of both Libor quotes and CDS spreads increasing from their historical levels," the CDS spreads' intraday variation "grew considerably larger than that of Libor quotes."

323. Given the method by which the BBA calculates LIBOR, which all of the Defendants understood, the "bunching" around the fourth-lowest rate is exactly what would occur if a number of banks sought in concert to depress LIBOR.

4. LIBOR's Divergence from its Historical Relationship with the Federal Reserve Auction Rate Indicates Suppression

324. A comparison between LIBOR and the Federal Reserve auction rate further suggests Defendants artificially suppressed LIBOR during the Relevant Period. An April 16, 2008 Wall Street Journal article noted that the Federal Reserve had recently auctioned off $50 billion in one-month loans to banks for an average annualized interest rate of 2.82% - 10 basis points higher than the comparable U.S. Dollar LIBOR rate. That differential would make no economic sense if the reported LIBOR rate was accurate, the Wall Street Journal observed: "Because banks put up securities as collateral for the Fed loans, they should get them for a lower rate than Libor, which is riskier because it involves no collateral." In other words, LIBOR should have been higher than the Federal Reserve auction rate, not lower.

325. A subsequent Wall Street Journal article raised further concerns about LIBOR's accuracy based on the comparison of one-month LIBOR with the rate for the 28-day Federal Reserve auction rate. According to the Wall Street Journal, because the Federal Reserve requires collateral:

> banks should be able to pay a lower interest rate [to the Fed] than they do when they borrow from each other [e.g., as ostensibly measured by LIBOR] because those loans are unsecured. It is the same reason why rates for a mortgage, which is secured by a house, are lower than those for credit cards, where the borrower doesn't put up any collateral. In other words, the rate for the Fed auction should be lower than Libor.

326. To the contrary, though, two days before the Wall Street Journal article, the rate for the 28-day Fed facility was 3.75%, significantly higher than one-month LIBOR, which was 3.18% that day (September 22, 2008).

5. LIBOR's Divergence from its Historical Correlation to Overnight Index Swaps also Suggests it Was Artificially Suppressed

327. Another measure of LIBOR's aberrant behavior with respect to other measures of banks' borrowing costs during the Relevant Period is its deviation

from the overnight-index swap ("OIS") rate. In his article analyzing LIBOR data for the second half of 2007 and 2008, Justin Wong observed that between 2001 and July of 2007, when the global credit and financial crisis began, the spread between LIBOR and the OIS rate "averaged eleven basis points." By July 2008, on the other hand, that gap approached 100 basis points and by October 2008, "it peaked at 366 basis points." While the spread "receded somewhat in November 2008 to 209 basis points," that was still "far above the pre-crisis level."

6. Additional Data Suggest LIBOR May Have Been Manipulated as Early as August 2006

328. As the empirical evidence supporting the existence of a massive conspiracy to manipulate LIBOR during the Relevant Period continues to develop, at least some of the data point to possible manipulation as early as August 2006. In a recent paper, Rosa Abrantes-Metz (of NYU Stern School of Business's Global Economics Group) and Albert Metz (of Moody's Investors Service) compared one-month LIBOR against the Fed Funds effective rate and the one-month Treasury Bill ("T-Bill") rate. Studying the period spanning early August 2006 through early August 2007, the authors observed the level of one-month LIBOR was "virtually constant," while the Fed Funds effective rate and the one-month T-Bill rate did "not present such striking stability." In other words, LIBOR was suspiciously consistent during a period of significant economic change. Because of that "highly anomalous" discrepancy, Abrantes-Metz and Metz examined the individual submissions of the U.S. Dollar Contributor Panel banks, which showed that during the studied period, the middle eight quotes used to set LIBOR each day were "essentially identical day in and day out." This was another "highly anomalous" finding.

329. The authors concluded that "explicit collusion" presented "the most likely explanation" for this anomalous behavior. They explained that because LIBOR quotes are submitted sealed, "the likelihood of banks moving

simultaneously to the same value from one day to the next without explicit coordination is extremely low, particularly given that their idiosyncrasies would not imply completely identical quotes under a non-cooperative outcome." They further opined "it is difficult to attribute it to tacit collusion or strategic learning, since the change is abrupt, the quotes are submitted sealed, and the quotes themselves sometimes change from one day to the next in an identical fashion."

330. Abrantes-Metz and Sofia B. Villas-Boas (of UC-Berkeley's Department of Agricultural & Resource Economics) used another methodology - Benford second-digit reference distribution - to track the daily one-month LIBOR rate over the period 2005-2008. Based on this analysis, the authors found that, for sustained periods in 2006 and 2007, the empirical standard-deviation distribution differed significantly from the Benford reference distribution for nearly all banks submitting quotes. The authors also observed large deviations from Benford for a sustained period in 2008.

331. Those studies indicate at least a possibility that Defendants' suppression of LIBOR occurred before <u>August of 2007</u>, by which time the evidence is indisputable that there was a conspiracy to manipulate LIBOR amongst the Defendants.

332. Occam's Razor states that "other things being equal, a simpler explanation is better than a more is set forth above, complex one." In this case, the overwhelming evidence points to one simple explanation, the existence of a worldwide conspiracy amongst the Defendants to manipulate LIBOR and other global benchmark interest rates.

K. <u>Defendants Faced Difficult Financial Circumstances Which Were Not Reflected in Their LIBOR Submissions</u>

333. The LIBOR submissions of most, if not all, of the Defendants, did not reflect the dire financial circumstances that they were facing. Based on empirical

evidence, some of which as well as their own public disclosures, the Defendant BBA member banks were facing a serious liquidity crisis in 2008 and 2009. Many of them required either capital infusions or governmental guarantees in order to avoid failing because of the massive amount of toxic assets on their balance sheets relating to the subprime mortgage crisis. The LIBOR submissions of the Defendants were too low in comparison to the true financial conditions of the Defendant BBA banks during the global credit and financial crisis.

1. Defendant Citigroup

334. On November 21, 2008, the Wall Street Journal reported that Citigroup executives "began weighing the possibility of auctioning off pieces of the financial giant or even selling the company outright" after the company faced a plunging stock price. The article noted Citigroup executives and directors "rushing to bolster the confidence of investors, clients and employees" in response to uncertainty about Citigroup's exposure to risk concerning mortgage-related holdings. On November 24, 2008, CNNMoney wrote:

> If you combine opaque structured-finance products with current fair-value accounting rules, almost none of the big banks are solvent because that system equates solvency with asset liquidity. So at this moment Citi isn't solvent. Some argue that liquidity, not solvency, is the problem. But in the end it doesn't matter. Fear will drive illiquidity to such a point that Citi could be rendered insolvent under the current fair-value accounting system.

335. On January 20, 2009, Bloomberg reported that Defendant Citigroup "posted an $8.29 billion fourth-quarter loss, completing its worst year, and plans to split in two under Chief Executive Officer Vikram Pandit's plan to rebuild a capital base eroded by the credit crisis. The article further stated, "The problems of Citi, Bank of America and others suggest the system is bankrupt."

336. Despite the serious financial problems at Citigroup, which required government intervention and prompted discussions about splitting Citigroup into its component parts, the Citigroup Defendants continued to provide LIBOR submissions that were suspiciously close to the other BBA member banks. This is

not possible absent manipulation since the actual cost of borrowing for Defendant Citigroup could not have been the same as the other Defendant BBA member banks.

2. Defendants RBS, Lloyds, and HBOS

337. An April 23, 2008 analyst report from Société Générale stated that, with respect to Defendant RBS's financial condition during that time period:

> Given the magnitude and change in direction in a mere eight weeks, we believe tha
>
> We also remain unconvinced that the capital being raised is in support of growth rather than merely to rebase and recapitalise a bank that overstretched itself at the wrong point in the cycle in its pursuit of an overpriced asset.
>
> * * *
>
> [I]n our eyes, RBS has not presented a rock solid business case that warrants investor support and the bank has left itself almost no capital headroom to support further material deterioration in either its assets or its major operating environments. We believe £16bn (7% core tier I ratio) would have provided a solid capital buffer.

338. The Société Générale analysts further opined, "[W]e are not of the belief that all of RBS' problems are convincingly behind it." They further explained, "When faced with the facts and the events leading up to yesterday's request for a £12bn capital injection, we believe shareholders are being asked to invest further in order to address an expensive mishap in H2 07 rather than capitalise on growth opportunities."

339. On October 14, 2008, the Herald Scotland reported that the government had injected £37 billion of state capital into three leading banks, including Defendants RBS and HBOS. The article observed, "Without such near-nationalisations, . . . Royal Bank of Scotland and HBOS, would almost certainly have suffered a run on their remaining reserves and been plunged into insolvency. Their share prices could scarcely have taken much more of their recent hammering."

340. On December 12, 2008, Bloomberg reported that shareholders approved Defendant HBOS's takeover by Defendant Lloyds following bad-loan charges in 2008 rising to £5 billion and an increase in corporate delinquencies. The article also quoted analysts characterizing Defendant HBOS's loan portfolio as "generally of a lower quality than its peers." Bloomberg further observed that Defendant HBOS suffered substantial losses on its bond investments, which totaled £2.2 billion, and losses on investments increased from £100 million to £800 million for the year.

341. A January 20, 2009 analyst report from Société Générale stated: "We would note that given the 67% drop in the share price following [RBS]'s announcements yesterday [relating to capital restructuring due to greater-than-expected credit-market related write downs and bad debt impairments in Q4], the loss of confidence in the bank's ability to continue to operate as a private sector player and concern over the potential ineffectiveness of the Asset Protection Scheme may prompt the UK government to fully nationalise the bank. In this instance, the shares could have very limited value, if at all."

342. On March 9, 2009, Bloomberg reported that Lloyds "will cede control to the British Government in return for state guarantees covering £260 billion ($A572 billion of risky assets)." The article further observed that in September 2008, Lloyds agreed to buy HBOS for roughly £7.5 billion as the British Government sought to prevent HBOS from collapsing after credit markets froze. The HBOS loan book was described as "more toxic than anyone ever dreamed."

343. On November 24, 2009, Bloomberg reported the Bank of England provided £62 billion ($102 billion) of "taxpayer-backed emergency financing" to RBS and HBOS at the height of the financial crisis in October 2008 and that "[t]he [financing] operations were kept secret until now to prevent unnerving markets."

344. With Defendant HBOS' financial condition deteriorating to the point where it needed assistance from the government and a buy-out by Defendant

Lloyds, it's actual costs of borrowings could not have been the same as the other Defendant BBA member banks. Similarly, Defendant Lloyds' cost of borrowing would also be significantly different. The fact that these banks provided very similar LIBOR submissions as other BBA member banks is strong evidence of the existence of a conspiracy to manipulate and artificially suppress LIBOR.

3. Defendant WestLB

345. A September 9, 2008 article in Spiegel Online reported WestLB was "heavily hit as a result of the US sub-prime crisis and the resulting credit crunch. Ill-advised speculation resulted in a 2007 loss of €1.6 billion -- leading the bank to the very brink of insolvency." The article reported that in early 2008, a special investment vehicle was set by WestLB's primary shareholders to "guarantee €5 billion worth of risky investments." The European Commissioner approved the public guarantee but demanded that the bank be "completely restructured to avoid falling afoul of competition regulations." The European Commissioner for Competition later warned that if WestLB did not significantly improve its restructuring package, Brussels would not approve the public assistance that European Union had already provided to the bank. Further, if that occurred, WestLB would have to pay back €12 billion to the EU.

346. On November 24, 2009, Bloomberg reported that BNP Paribas SA said "[i]nvestors should buy the euro [ ] on speculation that capital will need to be repatriated to support German bank WestLB AG." Furthermore, two German regional savings bank groups that hold a majority stake in WestLB were "prepared to let the Dusseldorf-based lender become insolvent" and that "the prospect of insolvency may force state-owned banks and savings banks outside North Rhine-Westphalia, WestLB's home state, to contribute to capital injections." Moreover, WestLB needed "as much as 5 billion euros ($7.5 billion) in capital and may be shut by Nov. 30 unless a solution for its capital needs can be found.

347. Similarly, WestLB's unique financial condition would have resulted in it putting in different LIBOR submissions than the other Defendants, if there was no collusion amongst the Defendants to manipulate LIBOR. The WestLB Defendants would have different borrowing costs than the other Defendants and that these differences should have been reflected in their LIBOR submissions.

L. Defendants Made Material Misrepresentations and Concealed Information They Had A Duty to Disclose to Plaintiff SANDAG

348. For the last few years, the Defendants, and all of them, intentionally and knowingly conspired to manipulate LIBOR rates, both to conceal their own financial weakness during the economic crisis but more importantly, to reap significant profits by manipulating rates used in derivative instruments that the Defendants themselves were parties to. In this way, the Defendants could deceive and improperly defraud counterparties to the LIBOR-linked derivative instruments that they entered into. The Defendants are liable to Plaintiff for fraud and fraudulent concealment because the Defendants made direct material misrepresentations that they knew would be relied upon by other parties, such as the Plaintiff, in establishing the exchange rate on LIBOR-linked derivative instruments.

349. Each day, the Defendants provided information to the BBA regarding their borrowing rates with full knowledge that the BBA would use those results to set LIBOR. The Defendants not only knew how the BBA calculated LIBOR but they also knew how LIBOR was used in the larger worldwide financial markets. Indeed, the Defendants had been instrumental in creating this market and relied upon this market for many of their own transactions. In fact, the Defendants knowingly and intentionally manipulated LIBOR with the knowledge and expectation that it would be relied upon by others in a vast number of transactions, ranging from interest rate swaps to mortgage rates. The Defendants themselves were counterparties to many of these same transactions. Every day that the

Defendants provided false information to the BBA regarding their borrowing rates was a false statement that the Defendants knew would affect and distort the LIBOR rates for multiple currencies, including the US Dollar. The Defendants, as members of the various LIBOR Contributor Panels, including the USD Contributor Panel, were the only ones who could affect and manipulate the LIBOR rate. Each day when the Defendants made false and misleading reports to the BBA about their borrowing rates, the Defendants did so with the knowledge and intent that those false reports would be relied upon by other parties in the financial markets, such as Plaintiff.

350. By making these false reports on a daily basis to the BBA, with the knowledge that it would be relied upon by thousands, if not millions, of other parties who enter into LIBOR-linked transactions, the Defendants imposed upon themselves a duty to be honest and completely truthful. The Defendants are therefore liable for fraudulent concealment for failing to reveal to the BBA and to the public that the reports they were making were false and fraudulent. Specifically, the Defendants intentionally concealed the truth about their manipulation from the BBA because they knew the BBA would report to the public, including Plaintiff, that the Defendants were engaging in fraud and were engaged in a conspiracy to manipulate LIBOR rates. When the Defendants made the decision to report their borrowing rates to the BBA, they had an obligation to be completely honest and also inform the BBA that the borrowing rates they were reporting were not their actual borrowing rates. The Defendants concealed from the BBA that they were reporting incorrect rates and they were doing so in order to manipulate LIBOR for their own benefit.

351. Plaintiff did, in fact, rely upon the manipulated LIBOR rate in entering into LIBOR-linked derivative instruments, and in making and receiving payments on those LIBOR-linked derivative instruments. Plaintiff suffered harm and damages in an amount to be determined at trial from those manipulations.

352. Plaintiff also entered into LIBOR-linked transactions with some of the Defendants as direct counterparties. Those Defendants are also directly liable to Plaintiff for fraud and fraudulent misrepresentation because they directly made false misrepresentations to Plaintiff and concealed information from Plaintiff that they had a duty to disclose. When the Defendants entered into a LIBOR-linked transaction, the Defendants made false misrepresentations regarding the LIBOR rate which would govern the transaction. The Defendants were making affirmative misrepresentations regarding what the true rate of interest on the LIBOR-linked transaction was, stating that it would be related to LIBOR as a neutral benchmark rate, instead of truthfully stating that it would be related to LIBOR as a benchmark mark that was manipulated by the Defendants. The Defendants also had a duty to be fully honest with Plaintiff when entering into these LIBOR-linked transaction and had an obligation to inform Plaintiff that the LIBOR rate that the transaction was indexed to was a manipulated rate that was being suppressed in the best interests of the Defendants. By failing to do so, the Defendants intentionally and knowingly concealed information that they had a duty to disclose.

V. PLAINTIFF DID NOT KNOW, NOR COULD IT REASONABLY HAVE KNOWN, ABOUT DEFENDANTS' MISCONDUCT UNTIL AT LEAST MARCH 2011

353. Before Defendant UBS' March 15, 2011 announcement that it had been subpoenaed in connection with the U.S. government's investigation into possible LIBOR manipulation, Plaintiff had not discovered, and could not with reasonable diligence have discovered, facts indicating Defendants were engaging in misconduct that caused LIBOR to be artificially depressed during the Relevant Period. Indeed, Defendants had actively sought to conceal the conspiracy. Even now, with global investigators conducting a massive probe into potential LIBOR manipulation, it has taken more than a year and a half for governments from across the world to even begin to grasp the true size and scope of the conspiracy.

354. Although some market participants voiced concerns earlier that LIBOR did not reflect the Defendants' true borrowing costs, those concerns were dismissed in large part because the Defendants actively denied the existence of a conspiracy. While there may have been general concern about LIBOR, there was no indication that Defendants were engaged in a fraud or a conspiracy. At that time, due to the importance of LIBOR and its role as a global benchmark interest rate, Plaintiff and other market participants believed in the integrity of the financial market and did not believe that the Defendants would manipulate a benchmark that was so fundamentally important to global financial markets.

A. Defendants' Unlawful Activities Were Inherently Self-Concealing

355. Defendants conspired to share information regarding their LIBOR submissions and to misrepresent their borrowing costs to the BBA. In so doing, Defendants intended to manipulate and did manipulate LIBOR by artificially depressing LIBOR, which allowed them to pay unduly low interest rates on LIBOR-based financial instruments they or others issued or sold to investors, including Plaintiff.

356. Defendants' misconduct was, by its very nature, self-concealing. First, those banks' actual or reasonably expected costs of borrowing were not publicly disclosed, rendering it impossible for investors, including Plaintiff, to discern (without sophisticated expert analysis) any discrepancies between Defendants' publicly disclosed LIBOR submissions and other measures of those banks' actual or reasonably expected borrowing costs. Second, internal communications within and among the banks likewise were not publicly available, which further precluded investors, including Plaintiff, from discovering Defendants' misconduct, even with reasonable diligence. It was not until the Barclays settlement and other government investigations began that the truth about the conspiracy came to light. Even then, only a fraction of the total evidence against all of the Defendants has been disclosed. However, the evidence obtained

pursuant to government subpoenas and document requests, as well as from the cooperation of Barclays and UBS show the size and scope of the LIBOR manipulation conspiracy. It required over a year and a half of an intensive global probe, involving investigators and regulatory authorities from multiple different countries to uncover the conspiracy, something that ordinary investors, such as Plaintiff, could not have done.

357. As a result of the self-concealing nature of Defendants' collusive scheme, no person of ordinary ability or intelligence would have discovered, or with reasonable diligence could have discovered, facts indicating Defendants were unlawfully suppressing LIBOR during the Relevant Period. Indeed, the Defendants actively concealed the conspiracy through misrepresentations to the public and to government agencies, as well as by concealing information. Even now, the full scope of the conspiracy remains unknown as investigations continue.

B. The British Bankers' Association and Defendants Deflected Concerns Raised by Market Observers and Participants About LIBOR's Accuracy

358. While there were some market participants who had concerns about LIBOR's accuracy, no one could have reasonably expected that the Defendants would conspire to manipulate one of the most important and commonly used global benchmark interest rates or engage in outright fraud. The Defendants and the BBA actively concealed the conspiracy and represented that any discrepancies were either anomalous events. The Defendants denied the existence of the global conspiracy that investigators have determined existed during the Relevant Period.

359. When certain market participants raised concerns about potential LIBOR manipulation in 2007 and 2008, the BBA agreed to conduct an inquiry into the allegations. Notably, shortly after the BBA announced its investigation had begun, the LIBOR U.S. Dollar Contributor Panel banks raised their submissions, causing LIBOR to record its biggest increase since August 2007. This rise was the result of a concerted effort amongst the Defendants to respond to

the BBA investigation. Again, these sizeable shifts in LIBOR during the Relevant Period could not have occurred, from a statistical perspective, without concerted effort by the Defendants.

360. The BBA ultimately determined that LIBOR had not been manipulated, thus providing further assurance to investors that the concerns expressed by some market participants were unfounded. However, as the global investigations have determined, the BBA was wrong in its determination. BBA, either through negligence or collusion, had failed to detect the LIBOR manipulation conspiracy. Regardless, investors such as Plaintiff had no reason to disbelieve the assurances by BBA that LIBOR was not being manipulated.

361. Moreover, the Defendants engaged in a media strategy that diffused the speculation that had arisen concerning LIBOR, which allowed them to conceal the conspiracy. For instance, on April 21, 2008, Dominic Konstam of Defendant Credit Suisse affirmatively stated the low LIBOR rates were attributable to the fact that U.S. banks, such as Defendant Citigroup and JPMorgan, had access to large customer deposits and borrowing from the Federal Reserve and did not need more expensive loans from other banks: "Banks are hoarding cash because funding from the asset-backed commercial paper market has fallen sharply while money market funds are lending on a short term basis and are restricting their supply." Through this media campaign, the Defendants sought to provide alternative explanations for any LIBOR discrepancies (such as cash hoarding) that would be a plausible to investors so that they would not uncover the truth, which is that the Defendants engaged in a massive conspiracy to manipulate LIBOR.

362. In an April 28, 2008 interview with the *Financial Times*, Mr. Konstam continued to defend LIBOR's reliability:

> Libor has been a barometer of the need for banks to raise capital. The main problem with Libor is the capital strains facing banks ... Initially there was some confusion that Libor itself was the problem, with talk of the rate being manipulated and not representative of the true cost of borrowing.

363. On May 16, 2008, in response to a media inquiry, JPMorgan commented "[t]he Libor interbank rate-setting process is not broken, and recent rate volatility can be blamed largely on reluctance among banks to lend to each other amid the current credit crunch."

364. The same day, Colin Withers of Defendant Citigroup assured the public that LIBOR remained reliable, emphasizing "the measures we are using are historic -- up to 30 to 40 years old."

365. And in May 2008, the Wall Street Journal asked numerous Defendants to comment on the media speculation concerning aberrations in LIBOR. Rather than declining or refusing to comment, those Defendants made affirmative representations designed to further conceal their wrongdoing. For example, on May 29, 2008, Defendant Citigroup affirmatively denied the existence of a LIBOR manipulation conspiracy and any involvement in any such conspiracy, stating that it continued to "submit [its] Libor rates at levels that accurately reflect [its] perception of the market." Defendant HBOS similarly asserted its LIBOR submissions constituted a "genuine and realistic" indication of the bank's borrowing costs. Plaintiff and other investors had no reason to disbelieve those representations or suspect that the Defendants were knowingly colluding to suppress LIBOR.

C. Plaintiff Could Not Have Known or Reasonably Discovered-Until at Least March 2011-Facts Suggesting Defendants Knowingly Colluded to Suppress LIBOR

366. Notwithstanding the smattering of statements in late 2007-early 2008 questioning LIBOR's viability, Plaintiff had no reason to suspect, and did not suspect, that the Defendants were knowingly colluding to suppress LIBOR. Even when Defendant UBS first announced that it was being investigated for LIBOR manipulation on March 15, 2011, Plaintiff did not realize the full scope of the conspiracy. While Plaintiff did enter into LIBOR-linked transactions and financial instruments during the Relevant Period, Plaintiff still believed in March of 2011

that there were only isolated incidents of LIBOR manipulation. However, it was not until the recent revelations from the Barclays settlement and UBS amnesty application, as well as the news of mass arrests and indictments, that investors, such as Plaintiff, could have known of the full scope of the conspiracy. Indeed, as a result of Defendants' secret conspiracy and their fraudulent concealment of relevant information, it was not until then that Plaintiff was on inquiry notice of the scope of the LIBOR manipulation conspiracy.

D. The Statute of Limitations is Tolled by the *American Pipe* Doctrine

367. Furthermore, Plaintiff's statute of limitations is tolled by the filing of the first putative class action complaint relating to the LIBOR manipulation conspiracy. In *American Pipe & Construction Co. v. Utah*, 414 U.S. 538 (1974), the United States Supreme Court held that the filing of a putative class action tolls the statute of limitation for all members of that putative class.

368. Defendants are equitably estopped to assert that any other period of limitations has run.

369. Defendants' conduct as alleged herein constitutes a continuing violation of law.

VI. PLAINTIFF HAS SUFFERED SIGNIFICANT INJURY AS A RESULT OF DEFENDANTS' LIBOR MANIPULATION CONSPIRACY

A. Defendants' Manipulation of LIBOR Broadly Impacted LIBOR-Based Financial Instruments and Investments

370. Throughout the Relevant Period, Defendants' manipulation of LIBOR caused damage to Plaintiff by inflating or artificially suppressing the interest earned and/or rate of return on LIBOR-linked transactions and financial instruments that Plaintiff held or purchased during the Relevant Period. Defendants' manipulation of LIBOR and other global benchmark interest rates have caused significant harm to Plaintiff in the form of interest payments that were greater than what Plaintiff should have paid, or below what should have been paid

to Plaintiff. While this Complaint relates to LIBOR, Plaintiff believes that other global benchmark interest rates were manipulated during the Relevant Period by the Defendants, and other financial institutions. That probe is ongoing. Furthermore, the time period of the conspiracy is also not currently known because, while there is indisputable evidence that, by at least August of 2007, the conspiracy had begun, there is also evidence that the conspiracy may have begun earlier.

371. As alleged herein, during the Relevant Period, Defendants and their co-conspirators engaged in a continuing agreement, understanding, or conspiracy in restraint of trade to artificially fix, maintain, inflate, suppress and stabilize LIBOR and thus the prices and rates of return on LIBOR-Based Derivatives sold by them.

372. In formulating and effectuating the contract, combination, or conspiracy, Defendants and their co-conspirators engaged in anticompetitive activities, the purpose and effect of which were to fix, maintain, suppress, inflate, and otherwise make artificial the price of LIBOR-Based Derivatives. These activities included the following:

a. Defendants participated in meetings and/or conversations to unlawfully discuss their reporting of their borrowing rates to Thomson Reuters for calculation of the daily LIBOR;

b. Defendants agreed during those meetings and conversations to unlawfully report their borrowing rates to Reuters for calculation of LIBOR in order to drive down LIBOR and otherwise to depress, inflate, or make artificial LIBOR;

c. Defendants signaled to one another their intention to depress or otherwise make artificial LIBOR and colluded with one another in achieving this unlawful and anticompetitive purpose; and

d. Pursuant to such an unlawful conspiracy in restraint of trade, Defendants knowingly and collusively traded in order to depress, inflate, or otherwise make artificial the price of LIBOR-Based Instruments.

B. Plaintiff Transacted LIBOR-Based Financial Instruments That Paid Artificially Low Interest Rates or Charged Artificially High Interest Rates

373. During the Relevant Period, Plaintiff held, entered into, and/or purchased LIBOR-linked transactions and financial instruments impacted by Defendants' misconduct. Those transactions were either directly with a Defendant, with third parties that Defendants, and each of them, knew would be impacted by Defendants' illegal collusion, or sold by dealer entities that were subsidiaries of, or otherwise affiliated with Defendants including, but not limited to: (I) Deutsche Bank Securities; (ii) Banc of America Securities, LLC; (iii) Barclays Capital Inc.; (iv) Credit Suisse Securities (USA) LLC; (v) UBS Financial Services Inc.; (vi) Citigroup Global Markets Inc.; (vii) Citigroup Funding, Inc.; (viii) RBS Securities, Inc. (f/k/a Greenwich Capital Markets, Inc.); (ix) Bank of Scotland plc; (x) JPMorgan Chase Bank, N.A.; (xi) J.P. Morgan Securities Inc. (f/k/a Bear Stearns & Co.); (xii) JP Morgan Securities LLC; (xiii) HSBC Bank USA, N.A.; (xiv) HSBC Finance Corporation; (xv) HSBC Securities (USA) Inc.

374. When Defendants conspired to manipulate LIBOR in a way that benefitted their trading positions, their counterparties, including Plaintiff, lost money as a result of that collusive manipulation.

a. UBS admitted this:

> When UBS derivatives traders influenced the submissions of other Contributor Panel banks – either by (1) seeking and receiving accommodations from their counterparts at such banks, or (2) influencing the submissions from other banks with assistance from cash brokers who disseminated misinformation in the marketplace – the manipulation of those submissions affected the fixed benchmark rates on various occasions….
>
> In the instances when the published benchmark interest rates were manipulated in UBS's favor due to UBS's manipulation of its own or any other Contributor Panel bank's submissions, that manipulation

> benefitted UBS derivatives traders, or minimized their losses, to the detriment of counterparties, at least with respect to the particular transactions comprising the trading positions that the traders took into account in making their requests to the rate submitters.

UBS DOJ ¶¶ 92, 96.

b. RBS admitted this:

> [RBS] negotiated and entered into derivatives transactions with counterparties knowing that that those counterparties were unaware of the efforts by RBS employees to manipulate the relevant LIBOR rate.
>
> Traders, former traders, and/or submitters at competing financial institutions agreed to coordinate with regard to Yen LIBOR submissions, causing the manipulation of the LIBOR reference rate on certain occasions. Because Yen LIBOR was a pricing component of derivatives contracts held by the financial institutions, the traders benefited from this agreement by affecting the profitability of the contracts on particular settlement dates.

RBS DOJ ¶81-82.

c. Barclays admitted this:

> In the instances when the published rates were manipulated in Barclays's favor due to Barclays's manipulation of its submissions, that manipulation benefitted Barclays swaps traders, or minimized their losses, to the detriment of counterparties, at least with respect to the particular transactions comprising the trading positions that the traders took into account in making their requests to the rate submitters.

Barclays DOJ ¶32.

375. Plaintiff and other public entities also paid supracompetitive prices to Defendants in that they assumed credit risk for which they were not adequately compensated. A party entering into a LIBOR-Based Instrument with a Defendant wanted to know not just the financial terms of the instrument (for example, the fixed rate in an interest rate swap) but also the creditworthiness of its counterparty and the systemic stresses faced by the financial system as a whole that could impact its counterparty's creditworthiness. A party transacting with a less creditworthy counterparty or at a time of systemwide financial stress that could affect its counterparty would demand better terms—for example, the ability to pay

a lower fixed rate in an interest rate swap—to compensate for exposure to increased credit risk. However, because of Defendants' collusive LIBOR suppression, each Defendant's individual LIBOR quotes were lower than they should have been (so that they did not accurately reflect each Defendant's creditworthiness), and the composite LIBOR was lower than it should have been (so that it did not accurately reflect the systemic stresses faced by the financial system as a whole). Plaintiff thus overpaid by assuming credit risk for which they were not adequately compensated due to both (a) bank-specific credit risk that was higher than it appeared due to artificially low LIBORs and (b) systemic stresses to the financial system that were more severe than they appeared due to artificially low composite LIBOR.

C. Plaintiff Suffered Antitrust Injury

376. Plaintiff suffered antitrust injury as a result of at least the following anticompetitive aspects of Defendants' conduct.

377. First, Defendants' anticompetitive conduct had severe adverse consequences on competition in that Plaintiff and other public entities that traded in LIBOR-Based Instruments during the Relevant Period were trading at artificially determined prices that were made artificial as a result of Defendants' horizontal price-fixing. As a consequence thereof, Plaintiff and other public entities suffered financial losses and were, therefore, injured in their business or property as alleged herein.

378. The conspiracy consisted of an agreement, understanding and concert of action among the Defendants, the substantial terms of which were to fix the price of LIBOR-based instruments by fixing LIBOR, a key component of the price thereof, during the Class Period. As the DOJ charged RBS on April 12, 2013, and RBS admitted, by colluding to fix LIBOR, Defendants conspired to fix the price of

LIBOR-based instruments, which was a conspiracy "in unreasonable restraint of interstate and foreign commerce."[81]

COUNT TWO
(Price Fixing)

> From at least as early as 2007 through at least 2010, Defendant THE ROYAL BANK OF SCOTLAND PLC, through its employees, and its co-conspirators, engaged in a combination and conspiracy in unreasonable restraint of interstate and foreign commerce. The aforesaid combination and conspiracy consisted of an agreement, understanding and concert of action among the Defendant and its coconspirators, the substantial terms of which were to fix the price of Yen LIBOR-based derivative products by fixing Yen LIBOR, a key component of the price thereof, on certain occasions.

In violation of Title 15, United States Code, Section 1.

379. Defendants admit that they are competitors and not passive actors involving LIBOR. For example, Defendants admit in their motions to dismiss the class actions that they are direct horizontal competitors with respect to the sale of LIBOR-Based Instruments. See Mem. of Law in Supp. of Defs. Mot. to Dismiss Antitrust Claims at 3 (June 29, 2012) (Doc. No. 166) ("Defendants do compete for the provision of loans and other financial products, some of which are indexed to USD LIBOR . . . ."); *id*. at 22 ("Banks are expected to compete in the marketplace of making loans, etc. . . .").

380. LIBOR is a component of the price of LIBOR-Based Instruments. In the "statement of facts" attached to its agreement with DOJ, RBS admitted that "Yen LIBOR was a pricing component of derivatives contracts held by the financial institutions." RBS SOF ¶87. The DOJ has also charged a former UBS employee, Thomas Hayes, with violating the Sherman Act by conspiring to fix Yen LIBOR as a component of price of LIBOR-based instruments. See Hayes-Darin Cmplt. at 3 ("The aforesaid combination and conspiracy consisted of

[81] In its Deferred Prosecution Agreement, RBS "acknowledge[d] and agree[d]" that the DOJ would file a criminal Information charging it with "one count of price-fixing, in violation of the Sherman Act, Title 15, United States Code, Section 1." RBS DPA p. 1. RBS also admitted that "the allegations described in the Information . . . are true and accurate." *Id.* p. 2.

an agreement, understanding, and concert of action among HAYES and his co-conspirators, the substantial terms of which were to fix Yen LIBOR, a key price component of Yen LIBOR-based derivative products.”).

381. During the Relevant Period, Defendants used LIBOR as the floating component of price on trillions of dollars of financial instruments, including the instruments or investments transacted by Plaintiff. Defendants’ collusive manipulation of LIBOR therefore directly affected a component of the price of the instruments or investments transacted by Plaintiff: it directly affected the rate used to compute the realized cash-flows on Plaintiff’s LIBOR-Based Instruments. Rather than obtaining products from Defendants whose value reflected an untainted index—the Federal Reserve Eurodollar rate, or the Treasury Bill rate, or even an untainted LIBOR—Plaintiff obtained financial products whose value was reduced by Defendants’ collusive suppression of a component of their price.

382. The Department of Justice charged RBS with price-fixing in violation of the Sherman Act and RBS admitted to the underlying facts. By letter dated March 22, 2013, the Department of Justice notified entities that entered into transactions with RBS that they may be victims of and may have been harmed by an antitrust violation by RBS, explaining:

> RBS and RBSSJ [RBS Securities Japan Limited] admit that certain RBS and RBSSJ traders attempted to manipulate and manipulated certain Yen and Swiss Franc LIBOR fixings on certain dates from 2006 through 2010 to benefit their trading positions in derivatives contracts to the detriment of counterparties to those contracts. RBS also admitted that certain traders conspired to fix prices in connection with Yen LIBOR from 2007 through 2010. To the extent RBS or RBSSJ traders were successful in manipulating Yen and/or Swiss Franc LIBOR, other parties to derivatives contracts, mortgages, loans, and/or credit cards that were tied to manipulated LIBOR rates also may have been harmed.

The DOJ’s actions unequivocally demonstrate that the conduct engaged in by at least RBS was the type of which the antitrust laws were designed to prohibit and may have harmed those persons who concluded transactions at the fixed price.

383. Plaintiff and other public entities—as in the RBS case, "parties to derivatives contracts" and "loans," among other financial products—have suffered a similar type of harm from collusive LIBOR suppression that victims in the RBS case suffered from RBS's LIBOR manipulation: they paid more, received less, or both on financial instruments tied to LIBOR than they would have absent Defendants' conspiracy to fix prices.

384. Second, Defendants' collusion restrained competition as to the benchmark in floating rate financial products.

385. In a free and competitive market, Defendants would have competed vigorously as to the benchmark used to calculate the floating component of price on various financial products to provide the best and most competitive products to their customers. They plainly did not do that.

386. As this Court noted:

> LIBOR is a proxy for the interbank lending market; indeed, it is precisely because LIBOR was thought to accurately represent prevailing interest rates in that market that it was so widely utilized as a benchmark in financial instruments.

In re LIBOR-Based Financial Instruments Antitrust Litigation, No. 11 MD 2262(NRB), 2013 WL 1285338, at *16 (S.D.N.Y. Mar. 29, 2013). But because of Defendants' collusion, LIBOR no longer accurately reflected the competitively-determined outcomes of the interbank lending market during the Class Period. Knowing that their collusion meant that LIBOR no longer served the function it was supposed to serve, Defendants in a competitive market would have competed to use alternative benchmarks that more accurately and reliably reflected actual competitive forces in the market. Instead, during the Class Period, Defendants adhered to LIBOR.

387. Evidence demonstrates that Defendants wanted to preserve the centrality of LIBOR rather than some other benchmark precisely because Defendants controlled LIBOR and could collude to manipulate it for their own

ends. According to a press report, in November 2008, in response to complaints about LIBOR manipulation, the BBA "drew up plans to license Libor to an independent third party that would pay a fee to administer the rate instead of the BBA."[82] This proposal was rejected by Defendants because "when BBA staffers pitched the idea to industry executives, they got the impression that ***the big banks***—which paid most of the BBA's bills through their membership fees—***wanted Libor kept in-house so that they could continue to influence it***, according to people familiar with the talks." *Id.* (emphasis added). By restraining competition as to the benchmark used to calculate the floating component of price, Defendants were able to maintain the dominance of LIBOR—a benchmark that they controlled and could collusively manipulate for their own ends, whether to generate profits for their trading books, to bolster their reputations in times of financial stress, or some other end.

388. Competitive market forces should have eliminated the use of LIBOR in financial instruments. That did not happen. Instead, LIBOR was the dominant benchmark for financial instruments sold by Defendants during the class period, including those sold to plaintiffs. Defendants' anticompetitive conduct directly harmed Plaintiffs and Class Members, who were sold trillions of dollars of financial instruments whose price included a collusively-set LIBOR as a component.

389. Third, Defendants' conduct restrained competition as to creditworthiness.

390. LIBOR submissions reflect perceived creditworthiness. As the DOJ explained, and UBS admitted:

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[82] David Enrich and Max Colchester, Before Scandal, Clash Over Control of Libor, Wall St. J., Sept. 12, 2012, *available at*: http://online.wsj.com/article/SB10000872396390443847404577631404235329424.html (emphasis added).

> Because a bank's LIBOR contributions, even if they are not based entirely on actual money market transactions, should correspond to the cost at which the bank perceives that it can borrow funds in the relevant market, a bank's LIBOR contributions may be viewed as an indicator of a bank's creditworthiness. If a bank's LIBOR contributions are relatively high, those submissions could suggest that the bank is paying more than others to borrow funds. Thus, a bank could be perceived to be experiencing financial difficulties because lenders were charging higher rates to that bank.

UBS DOJ ¶99.

391. Composite LIBOR reflected the creditworthiness of all large banks by acting as a measure of the stress faced by the financial system as a whole. As the BBA stated: "BBA LIBOR rates are calculated daily from the rates at which banks will agree to lend each other money, so it is accepted as an accurate barometer of how global markets are reacting to prevailing market conditions." (BBA, "Understanding BBA Libor—a briefing by the British Bankers' Association," May 27, 2010, *available at* bbalibor.com/download/1191).

392. In a competitive market, Defendants would compete with their peers, including other panel banks and all market participants, as to their perceived creditworthiness. Greater perceived creditworthiness benefits a bank in many ways, including in the market for LIBOR-Based Instruments: it can yield better collateral terms or fixed rates in interest rate swaps and other derivatives, and better terms in LIBOR-based business lending and borrowing. Similarly, weak perceived creditworthiness can lead to lower ratings, collateral calls, and other actions that can harm or even threaten the life of a bank.

393. Defendants who could truthfully post lower LIBOR submissions had a competitive advantage over Defendants who could not truthfully post lower LIBOR submissions because of LIBOR's importance as an indicator of a bank's creditworthiness. In a free and competitive market, then, each Defendant would have competed to appear more creditworthy than other panel banks through the posting of lower truthful LIBOR submissions, and the stronger banks would not have tolerated artificially low LIBOR submissions from the weaker banks.

394. However, during the Relevant Period, Defendants restrained competition among the banks for the best market perception of their creditworthiness. Instead of competing fully with each other to post the lowest but accurate LIBOR submissions, they conspired to post artificially low LIBOR submissions as a "pack," which reduced or otherwise altered the magnitude of the differences between their relative creditworthiness. And the more creditworthy banks did not force the less creditworthy banks to post accurate LIBOR submissions so that the less creditworthy banks could be revealed as weaker, permitting the stronger banks to take their business. Instead, the stronger banks acceded to the weaker banks' posting of falsely low LIBORs.

395. The restraint of competition as to creditworthiness harmed plaintiffs in two ways. First, it enabled collusive suppression. Had Defendants competed vigorously over their creditworthiness by striving to submit the lowest but accurate LIBORs relative to the competition, the suppression conspiracy could never have happened in the first place.

396. Second, the reduction of competition as to creditworthiness injured plaintiffs and Class Members by causing them to assume credit risk for which they were not adequately compensated. With competition for creditworthiness restrained, each Defendant was not posting accurately low LIBORs but rather artificially low LIBORs, and so plaintiffs transacting with Defendants were overpaying because they were transacting on terms that did not accurately reflect each Defendant's true credit risk. Further, the restraint on competition as to creditworthiness resulted in artificially low composite LIBORs, causing plaintiffs to overpay because they were not adequately compensated for the systemic stress faced by the financial system as a whole, which was not accurately reflected during the Class Period in composite LIBOR.

397. The aforementioned anticompetitive aspects of Defendants' collusive conduct are not exhaustive, and Plaintiffs believe that with the benefit of

additional discovery and expert analysis additional anticompetitive aspects will be discerned from their horizontal price-fixing scheme.

398. In the alternative to the per se theory of liability, Plaintiff alleges that Defendants conspired to engage in an unreasonable restraint of trade that is anticompetitive under the rule of reason.

399. During the Relevant Period, there were relevant markets for each category of LIBOR-Based Instruments identified in ¶¶ 32–34. They are the relevant markets for LIBOR-Based Asset Swaps, Collateralized Debt Obligations, Credit Default Swaps, Forward Rate Agreements, Inflation Swaps, Interest Rate Swaps, Total Return Swaps, Options, and floating rate notes, and other LIBOR-linked Derivative and Non-Derivative Instruments.

400. Defendants have market power in each of the relevant markets. Defendants, as members of the LIBOR panel, had the ability to control and exercised control over LIBOR.

401. Defendants' control over LIBOR meant that they were able, in fact, to suppress LIBOR and cause prices of LIBOR-Based Instruments to be supracompetitive in the relevant markets and the other injuries and anticompetitive effects as alleged herein. Defendants' ability to cause supracompetitive prices for LIBOR-Based Instruments in the relevant markets demonstrates their market power.

402. In addition, Defendants' agreement to exchange confidential, pre-publication LIBOR quotes also caused supracompetitive prices for LIBOR-Based Instruments in the relevant markets and the other injuries and anticompetitive effects as alleged herein.

403. Defendants' conduct independently violates the Sherman Act under the rule of reason.

D. Specific Examples of Plaintiff's LIBOR-Based Financial Instruments

404. Plaintiff and other public entities were injured by the anticompetitive conduct of Defendants and their unnamed co-conspirators because they transacted in LIBOR-based transactions at artificially-manipulated rates: Plaintiff and other public entities paid more, received less, or both, on LIBOR-linked financial instruments than they would have absent Defendants' collusive restraint. As set forth *supra*, one of the common types of financial instruments frequently based on LIBOR is the interest rate swap. SANDAG entered into several interest rate swaps in order to hedge the interest rate it was paying to bondholders on its variable-rate municipal bond issuances. SANDAG would pay a swap provider a fixed rate, and would receive a variable rate that was based on LIBOR, in order to effectively cancel out the variable rate paid to bondholders and convert it to a fixed rate. Because Defendants suppressed LIBOR, SANDAG was cheated out of a higher interest rate payment. The following transactions serve as examples of LIBOR-linked interest rate swaps purchased by SANDAG:

- On November 22, 2005, SANDAG initiated three forward starting interest rate swaps with Merrill Lynch Capital Services, Inc., Goldman Sachs Mitsui Marine Derivative Products, L.P., and Defendant Bank of America in connection with its planned variable rate bond issuances. Each swap carried a notional value of $200,000, and were set to start on April 1, 2008 and mature in 2038. Under the terms of each swap, SANDAG would pay fixed interest rates of 3.41% and 3.8165%, and would receive an interest rate of 65% of one-month LIBOR.

- On February 13, 2003, SANDAG initiated a forward starting swaption with Morgan Stanley Capital Services Inc. The swaption carried a notional value of $34,210,000, and was set to start on April 1, 2006. The swaption was terminated on April 1, 2008. Under the terms of the swaption, SANDAG would pay a fixed interest rates of 3.45%, and would receive an interest rate equal to one-month LIBOR.

VII. CLAIMS FOR RELIEF

FIRST CAUSE OF ACTION

VIOLATIONS OF SHERMAN ANTITRUST ACT (15 U.S.C. §§ 1, *ET SEQ.*)

405. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

406. Although the precise dates are not known to Plaintiff - but are known to the Defendants - Plaintiff alleges upon information and belief that from as early as August of 2007, and potentially continuing through the present, Defendants, and each of them, and their unnamed co-conspirators entered into agreements, understandings, and a conspiracy in restraint of trade to artificially fix, manipulate and/or suppress LIBOR, which significantly impacts the interest payments, price and value of financial instruments and investments linked to LIBOR. These agreements, understandings, and the conspiracy violated Section 1 of the Sherman Act, 15 U.S.C. §1.

407. The conduct of Defendants and their co-conspirators as alleged herein were within the flow of, were intended to, and did have a substantial effect on the foreign and interstate commerce of the United States. Defendants and their unnamed co-conspirators entered into and committed acts in furtherance of a conspiracy to manipulate LIBOR and thus manipulate the value and amounts paid on LIBOR-linked financial instruments and investments, to the significant

financial detriment of Plaintiff. In entering into this conspiracy and committing these acts, Defendants, and each of them, violated the federal antitrust laws, including the Sherman Antitrust Act and the Clayton Antitrust Act.

408. In entering into and conducting the conspiracy as agreed, Defendants, and each of them, and their unnamed co-conspirators committed the acts they agreed to commit, including those specifically set forth herein and additional acts and conduct in furtherance of the conspiracy, with the specific goals and intent to commit the following:

a. fix, manipulate and/or suppress LIBOR during the Relevant Period;

b. submit false and incorrect LIBOR quotes in order to fix, manipulate and/or suppress LIBOR;

c. fix, manipulate and/or suppress the amount of interest payments Defendants were required to make on financial instruments linked to LIBOR.

409. The impact on Plaintiff of the wrongful conduct of the Defendants and their unnamed co-conspirators includes the following:

a. Restraint of, and/or manipulation of LIBOR rates in the United States;

b. Manipulation of LIBOR by deliberate suppression, resulting in artificially low and non-competitive LIBOR rates for Defendants, allowing the Defendants to reduce the amount of money paid on LIBOR-linked financial instruments;

c. Self-certifying manipulation of LIBOR, by over-reporting, resulting in artificially high and non-competitive LIBOR rates for Defendants, allowing Defendants to reap wrongful gains;

d. Denial to the public of a LIBOR benchmark rate free of manipulation, inflating, and suppression; and

e. Loss of the integrity of the global financial system, especially as it relates to global benchmark interest rates that are central to the operation of global financial markets.

410. Plaintiff has been injured and will continue to be injured in its business and property by receiving less money from LIBOR-linked financial instruments during the time when LIBOR was artificially manipulated and suppressed and as a result, is receiving less money than it should have received in a perfectly competitive market in which there was no collusion in an amount according to proof. Plaintiff has also received far less money from LIBOR-linked financial instruments to reflect the true risk taken on by the Plaintiff in acquiring those LIBOR-linked financial instruments.

411. Conversely, when Defendants, and each of them, and their unnamed co-conspirators were not engaged in suppressing LIBOR, they were manipulating LIBOR by reporting inaccurately higher borrowing rates when it served their financial advantage to the detriment of Plaintiff. Thus, Plaintiff has also been injured and will continue to be injured in its business and property by paying higher interest on LIBOR-linked financial instruments during the time LIBOR was artificially manipulated by being inflated and as a result, paid more money than it should have paid in a perfectly competitive market in which there was no collusion, in an amount according to proof. For these LIBOR-linked financial instruments Plaintiff paid far more money that fails to reflect the true risk taken on by the Plaintiff in acquiring those LIBOR-linked financial instruments.

412. Pursuant to the Clayton Antitrust Act, Plaintiff may be authorized to recover three times the damages it sustained plus interest and reasonable attorneys' fees, costs and expenses.

413. Plaintiff is entitled to monetary relief, as trebled under the statute, as well as an injunction against Defendants, preventing and restraining the violations alleged herein.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

<u>SECOND CAUSE OF ACTION</u>

VIOLATIONS OF CALIFORNIA CARTWRIGHT ANTITRUST ACT

414. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

415. The Defendants and their unnamed co-conspirators violated California Business and Professions Code section 16700, *et seq*. (the "Cartwright Act"), by forming one or more combinations to accomplish purposes prohibited by and contrary to the Cartwright Act. They engaged in an agreement, contract, combination, trust and/or conspiracy to manipulate LIBOR and thus manipulate the value and amounts paid on LIBOR-linked financial instruments, to the harm and detriment of those receiving monies on those LIBOR-linked financial instruments, many of which were LIBOR-linked financial instruments in which one of the Defendants was a counterparty.

416. The Defendants and their unnamed co-conspirators committed acts that constituted prohibited conduct under the Cartwright Act, including but not limited to making illegal agreements among themselves to artificially manipulate LIBOR and thereby reduce the returns that public entities, including Plaintiff, earned on LIBOR-linked financial instruments, or increased the interest rates that public entities, including Plaintiff, should have paid LIBOR-linked financial instruments. This scheme involved reaching agreements amongst the Defendants and their unnamed co-conspirators regarding how much to lower LIBOR in order to best effectuate the pecuniary interest of the Defendants. Once that agreement was reached, the Defendants would conspire to quote LIBOR rates to the BBA and Thomson Reuters that would manipulate LIBOR to reach the rates pre-determined by the Defendant co-conspirators. Defendants' conduct has unfairly and unlawfully decreased the return that Plaintiff and other public entities are able to

earn on LIBOR-linked financial instruments, or increased the interest rates that public entities, including Plaintiff, should have paid LIBOR-linked financial instruments.

417. As a direct result of the unlawful and unfair actions of Defendants and their unnamed co-conspirators, which actions are continuing, Plaintiff suffered injury to its business and property. As a direct result of the conduct of the Defendants, the Plaintiff has received, *inter alia*, lower interest rate, or paid higher interest rates, for LIBOR-linked financial instruments than it would have in a free and fair market without market collusion, and not been subject to uncompensated, higher credit risks for accepting lower, or paying higher, LIBOR interest rates on financial instruments than it would have otherwise but for the LIBOR price manipulation of the Defendants. Thus, as a direct and proximate result of the illegal and unlawful acts of the Defendants, Plaintiff has been injured and financially damaged in its business and property in an amount to be determined according to proof. These injuries have caused, and will continue to cause, damages to Plaintiff.

418. As a direct and legal result of the acts of Defendants and their unnamed co-conspirators, Plaintiff was required to file this action, resulting in ongoing attorneys' fees, costs, and other expenses for which it seeks recovery according to proof.

419. Pursuant to the Cartwright Act, Plaintiff is authorized to recover three times the damages it sustained plus interest and reasonable attorneys' fees, costs and expenses.

420. Plaintiff is entitled to monetary relief, as trebled under the statute, as well as an injunction against Defendants, preventing and restraining the violations alleged herein.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

THIRD CAUSE OF ACTION

FRAUD AND DECEIT (AFFIRMATIVE AND CONCEALMENT)

421. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

422. The Defendants, and each of them, made material representations and omissions which were false and misleading, including but not limited to making affirmative misrepresentations directly to Plaintiff as well as making affirmative misrepresentations to third parties such as the British Bankers' Association ("BBA") that it knew, intended and expected to be relied upon by Plaintiff. The Defendants also concealed material information from Plaintiff that the Defendants had a duty and obligation to disclose to Plaintiff, a duty that arose from the decision to the Defendants to make affirmative representations, which then imposed on them a duty to ensure that those representations were completely truthful and accurate. Defendants concealed from Plaintiff the fact that they were involved in manipulating LIBOR, which impacted transactions and financial instruments in which Plaintiff entered into with one or more of the Defendants in this action, as well as transactions and financial instruments with third parties.

423. Defendants made these misrepresentations and omissions of material fact while entering directly into transactions with Plaintiff which involved LIBOR in the determination of either the value of the transaction or financial instruments or the amount that would be paid to the Plaintiff. The Defendants also engaged in their intentional fraud with full knowledge that their misrepresentations would be transmitted to the BBA and would therefore impact LIBOR. Indeed, the Defendants fully understood how the BBA calculated LIBOR and therefore knew and expected their misrepresentations to affect LIBOR rates in a very specific way for their benefit. The Defendants therefore fully knew how their misrepresentations would impact the financial markets and entities and individuals who deal in the financial markets, such as Plaintiff.

424. Because the Defendants were making affirmative statements that were untrue, and because certain Defendants had entered into direct transactions with Plaintiff, the Defendants had an obligation and duty to disclose to the Plaintiff that they manipulated LIBOR and were involved in a conspiracy to manipulate LIBOR which directly impacted LIBOR-linked transactions and financial instruments between Plaintiff and one or more of the Defendants, as well as transactions with third parties that the Defendants knew would be impacted by Defendants' fraud.

425. The Defendants, and each of them, made the representations and failed to disclose and suppressed information they had a duty to disclose, as set forth in this complaint. For example, the Defendants made direct misrepresentations to Plaintiff and intentionally concealed material facts from Plaintiff. Defendants also concealing from the BBA and others the scope and nature of their LIBOR manipulation. The Defendants did so with knowledge of the falsity of their statements and representations and knew that they were failing to disclose material facts which they had a duty to disclose.

426. At the time these misrepresentations were made and the material facts not disclosed, Plaintiff was ignorant of the true facts. If Plaintiff had known the truth, Plaintiff would have either not entered into the transactions or acquired the financial instruments or insisted on using a different benchmark interest rate.

427. Plaintiff reasonably relied on these representations in entering into transactions and trading financial instruments linked to LIBOR.

428. As a direct and proximate result of the wrongful conduct of each of the Defendants, Plaintiff entered into transactions and traded in financial instruments linked to LIBOR and has since suffered and will continue to suffer economic losses and other general and specific damages, all in an amount to be determined according to proof.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

FOURTH CAUSE OF ACTION

NEGLIGENT MISREPRESENTATION

429. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

430. The Defendants, and each of them, made material representations which were false and misleading, including but not limited to making affirmative misrepresentations directly to Plaintiff as well as making affirmative misrepresentations to third parties such as the British Bankers' Association ("BBA") that it knew, intended and expected to be relied upon by Plaintiff. The Defendants made these misrepresentations with reckless disregard for the truth of those statements, knowing that they were making those statements based on directives from senior management to improve the financial position of the Defendants and to conceal the Defendants' financial weakness from the markets. Instead of making true and honest submissions to the BBA, as they were required to, the Defendants recklessly made submissions to the BBA irrespective of the truth. The Defendants also made material misrepresentations to the Plaintiff with reckless disregard of the truth regarding what the true interest rate was on transactions entered into between Plaintiff and certain of the Defendants.

431. Defendants made these misrepresentations of material fact while entering directly into transactions with Plaintiff which involved LIBOR in the determination of either the value of the transaction or financial instruments or the amount that would be paid to the Plaintiff. The Defendants also made material misrepresentations to the BBA with full knowledge that their misrepresentations would impact LIBOR. Indeed, the Defendants fully understood how the BBA calculated LIBOR and therefore knew and expected their misrepresentations to affect LIBOR rates in a very specific way for their benefit. The Defendants therefore fully knew how their misrepresentations would impact the financial

markets and entities and individuals who deal in the financial markets, such as Plaintiff.

432. The Defendants, and each of them, made false representations to Plaintiff and others, as set forth in this complaint, including but not limited to direct misrepresentations to Plaintiff as well as misrepresentations to the BBA about their true borrowing costs. The Defendants did so with reckless disregard of the falsity of their statements and representations. At the time the Defendants made these material misrepresentations, Defendants did not have a reasonable basis to believe those statements to be true.

433. At the time these misrepresentations were made Plaintiff was ignorant of the true facts. If Plaintiff had known the truth, Plaintiff would have either not entered into the transactions or acquired the financial instruments or insisted on using a different benchmark interest rate.

434. Plaintiff reasonably relied on these representations in entering into transactions and trading financial instruments linked to LIBOR.

435. As a direct and proximate result of the wrongful conduct of each of the Defendants, Plaintiff entered into transactions and traded in financial instruments linked to LIBOR and has since suffered and will continue to suffer economic losses and other general and specific damages, all in an amount to be determined according to proof.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

FIFTH CAUSE OF ACTION

INTERFERENCE WITH ECONOMIC ADVANTAGE

436. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

437. An economic relationship existed between the Plaintiff and issuers or sellers of LIBOR-linked financial instruments, which obligated the issuers or sellers to make payments to Plaintiff at a rate dependent on LIBOR.

438. As a direct result of Defendants' unlawful manipulation and artificial suppression or inflating of LIBOR, the amounts owed to Plaintiff by these issuers and sellers of LIBOR-linked financial instruments was not accurate and was reduced or inflated, as the case may be. The Defendants' misconduct interfered with and disrupted the relationship between Plaintiff and others (all of which can be easily identified as the counterparties to LIBOR-linked transactions and/or financial instruments) by turning a global benchmark interest rate that all parties relied on as being honest and reliable into a number that was pre-determined by the Defendants pursuant to a conspiracy. Since LIBOR was manipulated, Plaintiff received less money on LIBOR-linked transactions and/or financial instruments than it should have, as well as overpaid on LIBOR-linked transactions and/or financial instruments.

439. Defendants acted with knowledge that its misconduct and wrongful acts would interfere with and disrupt the relationship between buyers and sellers of LIBOR-linked financial instruments, including Plaintiff. Defendants are all major players in the global financial markets and were full aware of the importance of LIBOR and the number of transactions that used LIBOR as a benchmark. Defendants knew that the financial instruments linked to LIBOR have, in total, a notional value in the trillions of dollars. Defendants knew and intended that their actions and misconduct would have significant impacts on many others, including Plaintiff. Otherwise, Defendants would have no reason to manipulate LIBOR if they did not know such manipulation would impact such a large number of individuals and entities that it would allow the Defendants to reap hundreds of millions of unlawful profits if they could manipulate LIBOR by just a fraction of one percentage point.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

SIXTH CAUSE OF ACTION

BREACH OF THE IMPLIED COVENANT OF GOOD FAITH AND FAIR DEALING

440. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

441. Plaintiff has entered into LIBOR-linked transactions and/or acquired LIBOR-linked financial instruments from one or more of the Defendants. These transactions and/or financial instruments required that Defendants make payments to Plaintiff premised on LIBOR. An artificially suppressed LIBOR allowed the Defendants and their unnamed co-conspirators to pay Plaintiff less than what Plaintiff had a right to earn. An artificially inflated LIBOR allowed Defendants and their unnamed co-conspirators to reap higher returns than what they were entitled to earn.

442. Plaintiff has done all, or substantially all of the significant things that it was required to do pursuant to the LIBOR-linked transactions and/or financial instruments, or it was excused from having to do those things.

443. All conditions required for the performance of the Defendants of their obligations had occurred.

444. The Defendants breached the implied covenant of good faith and fair dealing by improperly colluding amongst each others to manipulate and artificially suppress or artificially inflate the rate of LIBOR during the Relevant Period. By doing so, the Defendants were able to improperly reduce the amount of monies that were owed to the Plaintiff by the Defendants.

445. Within each contract there is implied a covenant of good faith and fair dealing. The Defendants had a duty not to act in a manner that would deprive the Plaintiff of the benefit of its bargains with the Defendants. By manipulating and

artificially suppressing or inflating LIBOR, Defendants acted in an unlawful way to violate the spirit of the agreements between the Defendants and the Plaintiff by changing the benchmark used to calculate how much money was owed by Defendants to Plaintiff.

446. As a direct result of the improper breach of the implied covenant of good faith and fair dealing, Plaintiff has been injured in an amount to be proven at trial, but no less than what Plaintiff should have received on LIBOR-linked transactions and/or financial instruments but for the manipulation of LIBOR by the Defendants.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

SEVENTH CAUSE OF ACTION

UNJUST ENRICHMENT

447. Plaintiff repeats and realleges each of the foregoing paragraphs of this Complaint and incorporates them by reference as though set forth in full herein.

448. By their wrongful acts and omissions, Defendants were unjustly enriched at the expense of and to the detriment of Plaintiff.

449. Defendants knowingly acted in an unfair, unconscionable, and oppressive manner towards Plaintiff.

450. Through their unlawful conduct, Defendants knowingly received and retained wrongful benefits and funds from the Plaintiff. Defendants thereby acted with conscious disregard for the Plaintiff and its rights, as well as the rights of Plaintiff's constituents and beneficiaries.

451. As a result of their unlawful conduct, Defendants have realized substantial ill-gotten gains. Defendants have unlawfully manipulated LIBOR at the expense of, and to the detriment of, Plaintiff, to the unlawful benefit of the Defendants.

452. Plaintiff's detriment and Defendants' enrichment are traceable to, and resulted directly and proximately from, the conduct challenged in this Complaint. Defendants' retention of such funds under these circumstances constitutes unjust enrichment as Defendants have no right to the benefits that were obtained through their manipulation of LIBOR.

453. The financial benefits that Defendants derived from their illegal and unlawful manipulation of LIBOR rightfully belong to Plaintiff. The Court should compel Defendants to disgorge to Plaintiff all unlawful or inequitable proceeds Defendants received.

WHEREFORE, Plaintiff prays for judgment against Defendants, and each of them, as set forth below.

VIII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays that:

A. The Court adjudge and decree that the acts of the Defendants are illegal and unlawful;

B. That the Court enter judgment awarding the Plaintiff damages against Defendants for all economic, monetary, actual, consequential, and compensatory damages the Funds suffered as a result of Defendants' conduct, or rescission, together with pre- and post-judgment interest at the maximum rate allowable by law;

C. That the Court award Plaintiff exemplary or punitive damages against Defendants to the extent allowable by law;

D. That the Court award Plaintiff damages against Defendants for Defendants' violation of the federal antitrust laws and California state antitrust laws in an amount to be trebled in accordance with those laws;

E. That the Court issue an injunction prohibiting Defendants from continuing the misconduct alleged in this Complaint, including their ongoing manipulation of LIBOR;

F. That the Court order the disgorgement of the ill-gotten gains Defendants derived from their misconduct;

G. That the Court award the Plaintiff restitution of all amounts it paid to Defendants as consideration for notes and other financial instruments affected by Defendants' misconduct;

H. That the Court award Plaintiff its costs of suit, including reasonable attorneys' fees and expenses; and

I. That the Court award such other and further relief as the Court may deem just and proper.

Dated: June 25, 2013 **COTCHETT, PITRE & McCARTHY, LLP**

By: *s/Nanci E. Nishimura*
NANCI E. NISHIMURA
Attorneys for Plaintiff

IX. JURY TRIAL DEMAND

Plaintiff demands a trial by jury of all of the claims asserted in this Complaint so triable.

Dated: June 25, 2013

COTCHETT, PITRE & McCARTHY, LLP

By: *s/Nanci E. Nishimura*
NANCI E. NISHIMURA
Attorneys for Plaintiff